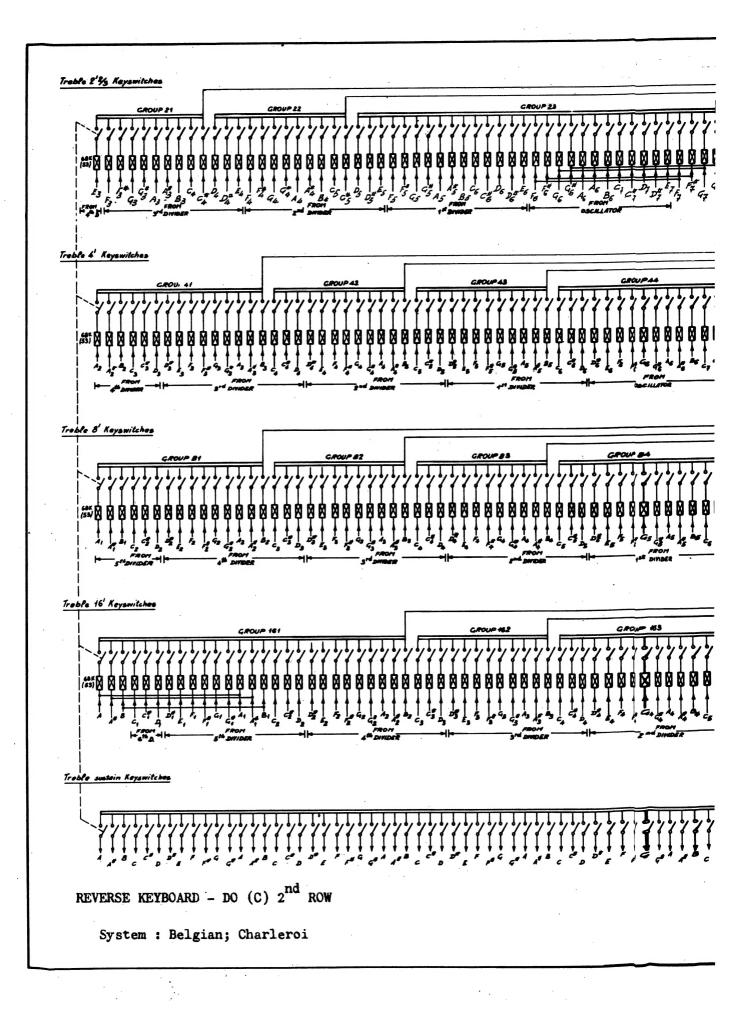
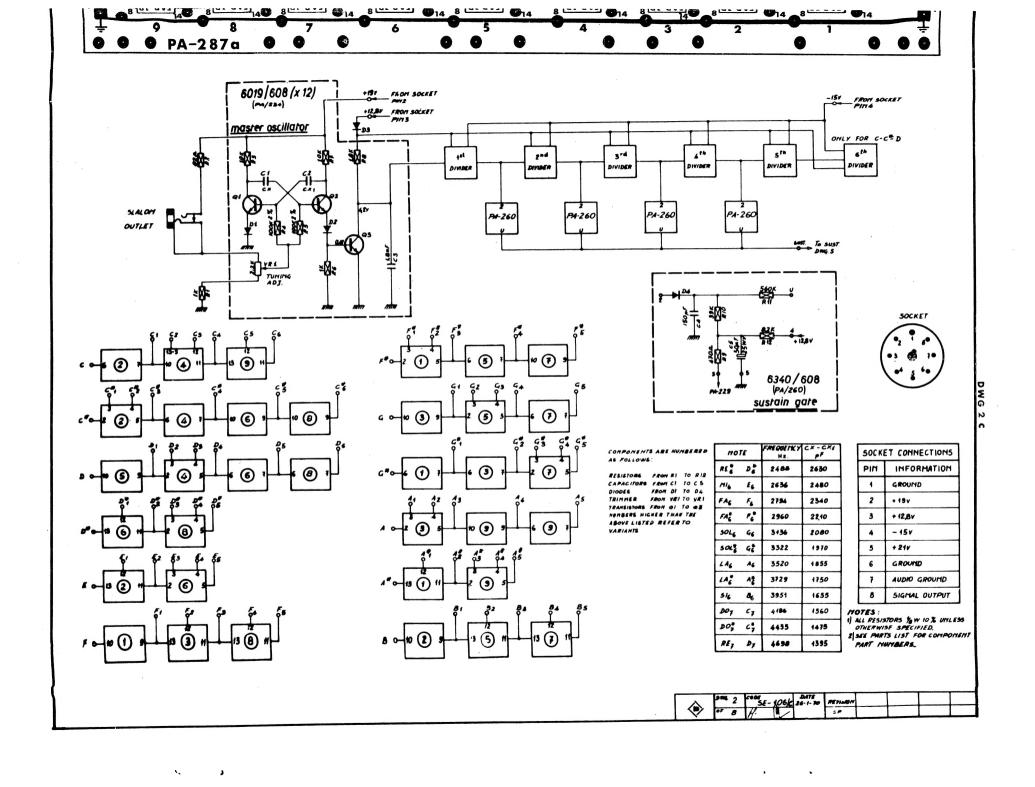


TRANSICORD DE LUXE

SERVICE MANUAL

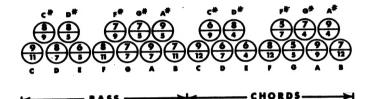


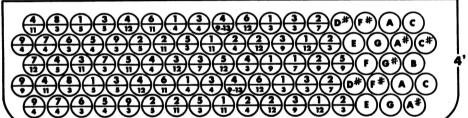


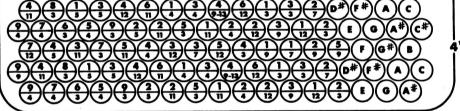
REVERSE KEYBOARD - DO (C) 2nd ROW

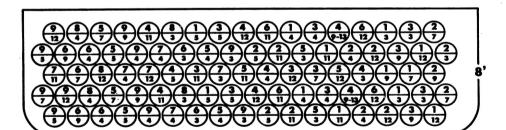
REFERENCE TABLE KEY to GENERATOR-BOARD

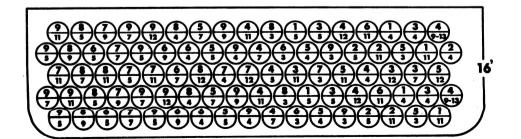
System: Belgian; Charleroi











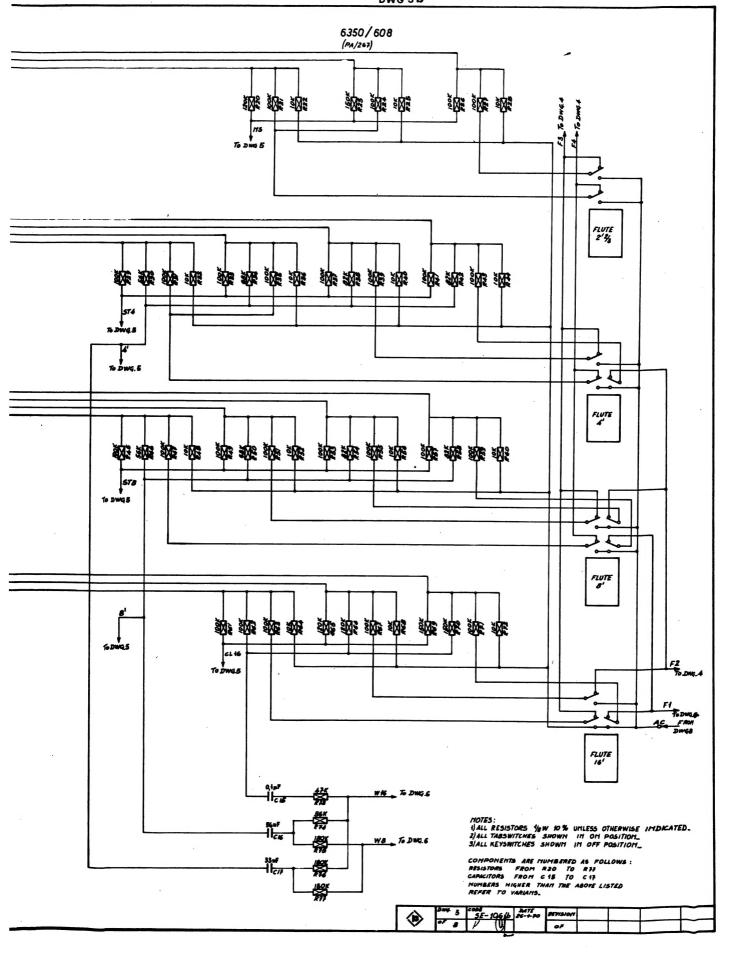
1. NOTE

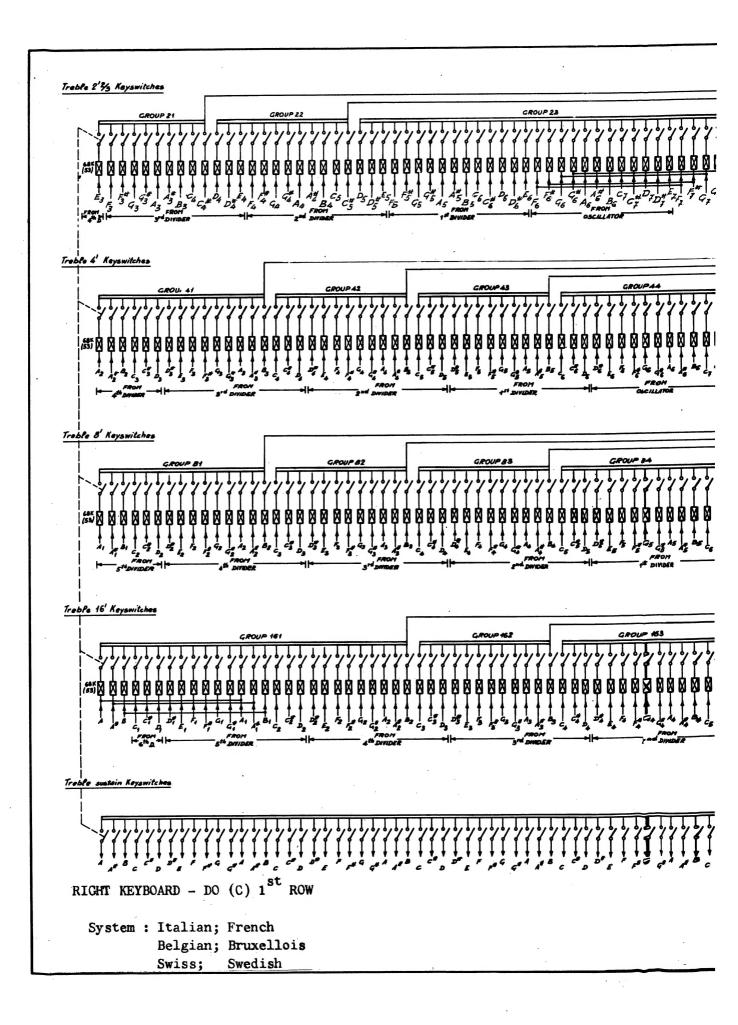
The tone generators referring to the notes of the keyboard are indicated with two numbers marked on the printed circuit PA-287. The upper number indicates the integrated circuit. The lower one indicates the pin of the IC.

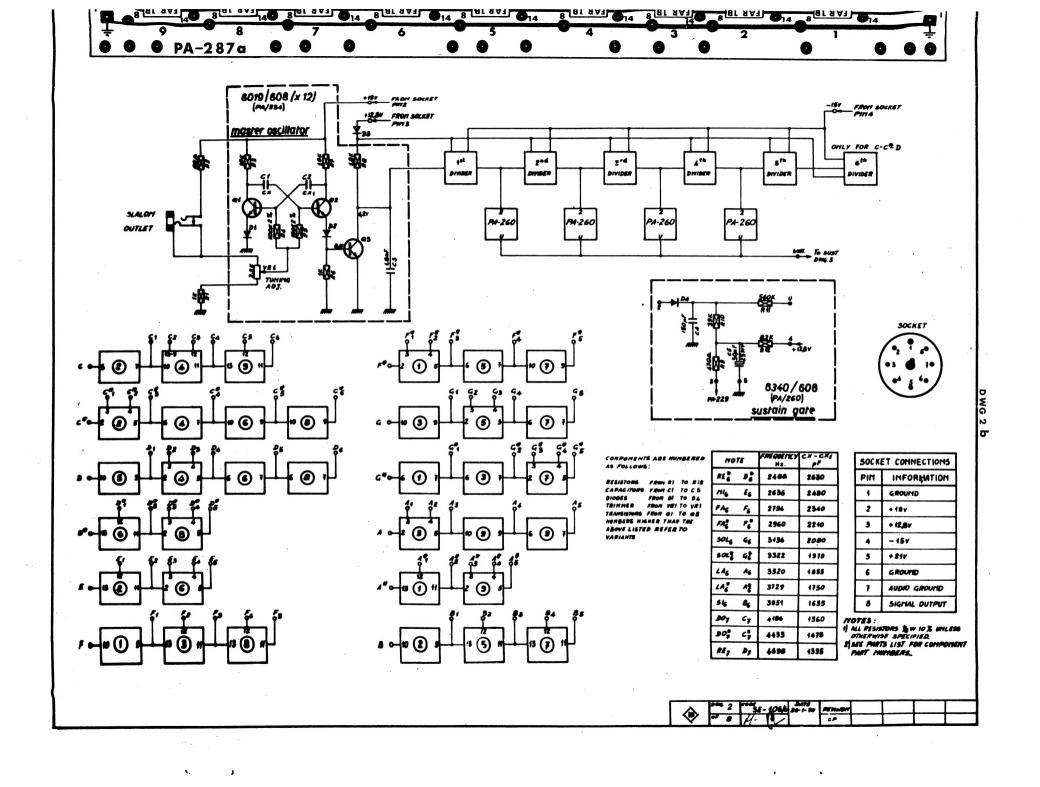
2. CONNECTION OF THE IC

in order to avoid any mistako, make connections taking care that the positions of the pins are not inverted on the printed circuit board PA-287. On the printed board the positions are indicated by numbers 1-7 and 8-14 while the corresponding plus of the IC can be found by placing the IC in such a position that figure roads from left to right ¶N___







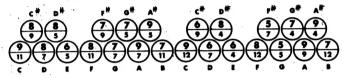


RIGHT KEYBOARD - DO (C) 1 st ROW

REFERENCE TABLE KEY to GENERATOR-BOARD

System: Italian; French Belgian; Bruxellois

Swiss; Swedish



1. NOTE

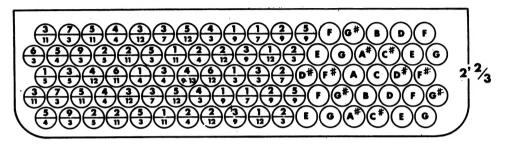
The tone generators referring to the notes of the keyboard are indicated with two numbers marked on the printed circuit PA-287.

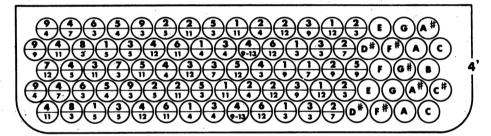
The upper number indicates the integrated circuit. The lower one indicates the pin of the IC.

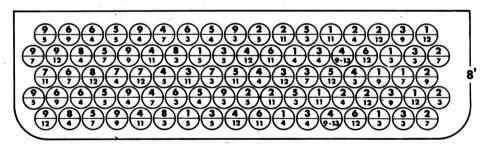
2. CONNECTION OF THE IC

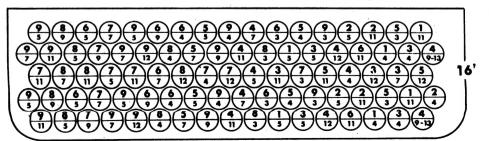
In order to avoid any mistake, make connections taking care that the positions of the pins are not inverted on the printed circuit board PA=287. On the printed board the positions are indicated by numbers 1-7 and 8-14 while the corresponding pins of the IC can be found by placing the IC in such a position that figure reads from left to right QN_{-}

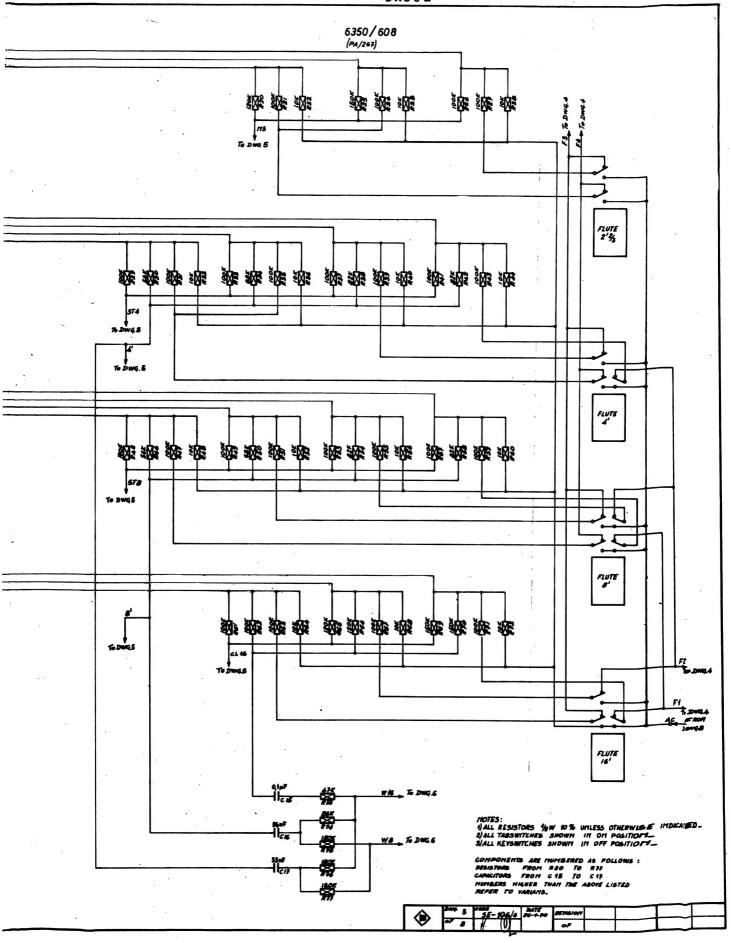
7AR-18 9N---

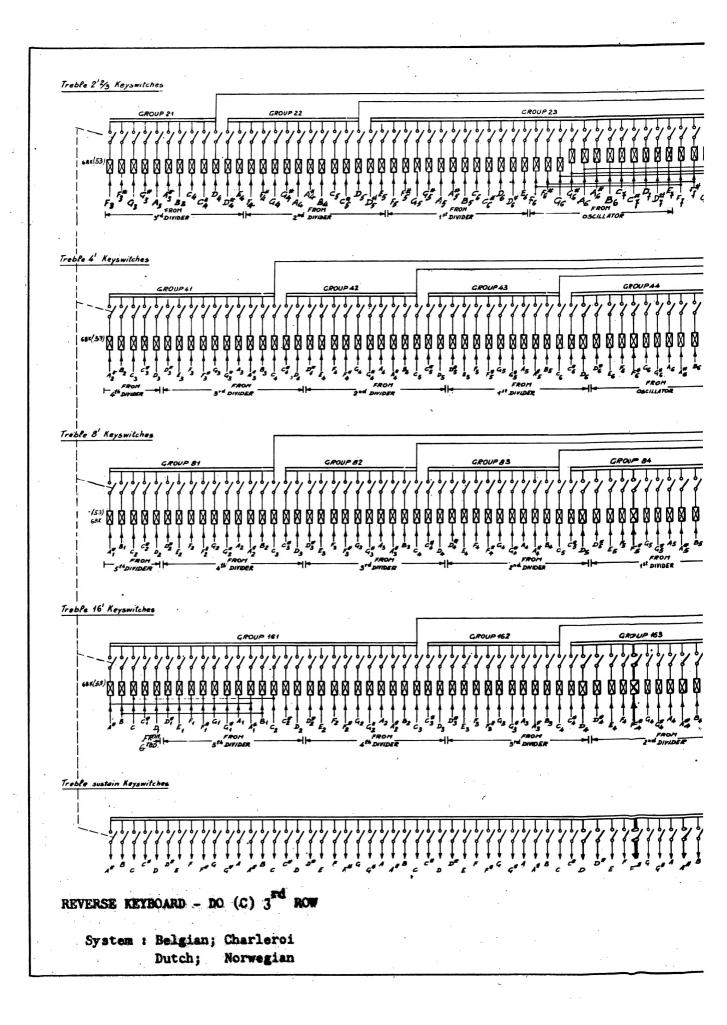


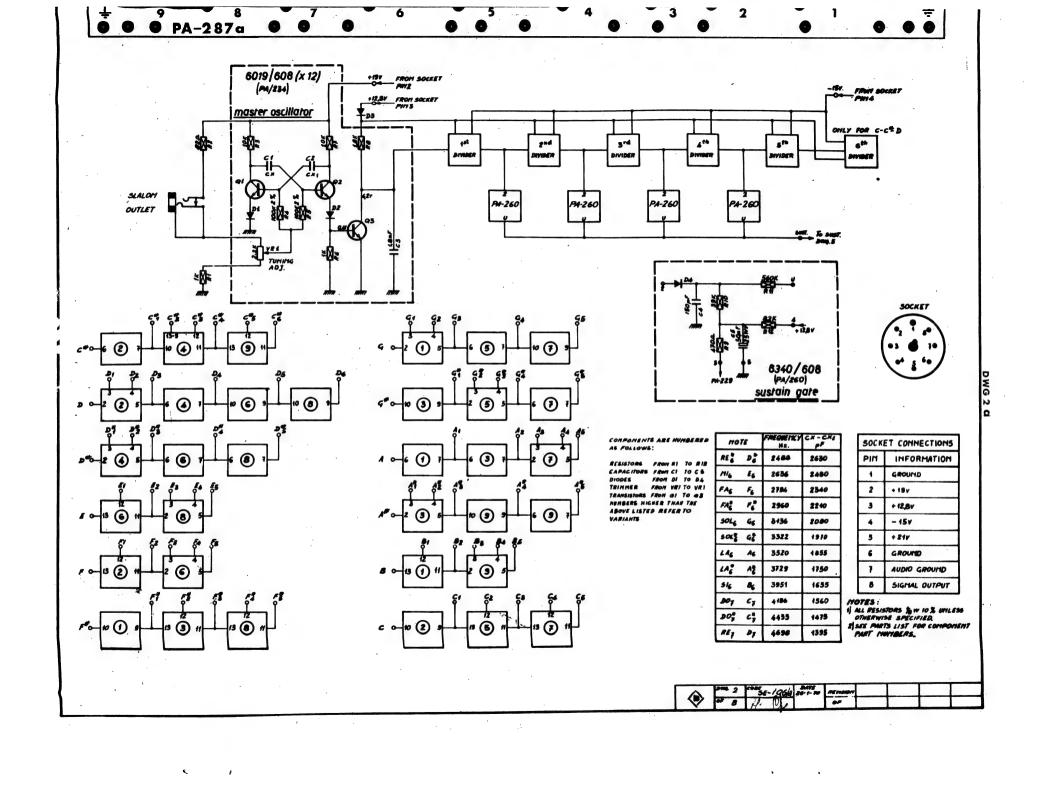










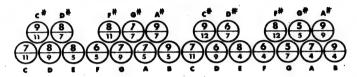


REVERSE KEYBOARD - DO (C) 3rd ROW

REFERENCE TABLE KEY to GENERATOR-BOARD

System : Belgian; Charleroi

Dutch; Norwegian



1. NOTE

The tone generators referring to the notes of the keyboard are indicated with two numbers marked on the printed circuit PA-287.

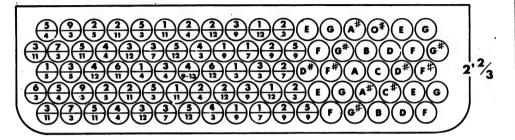
The upper number indicates the integrated circuit, the lower one indicates

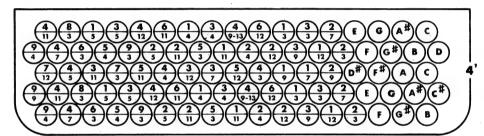
The upper number indicates the integrated circuit. The lower one indicates the pin of the IC.

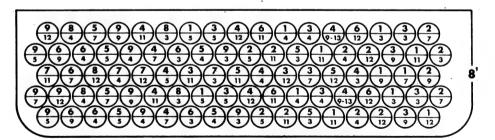
2. CONNECTION OF THE IC.

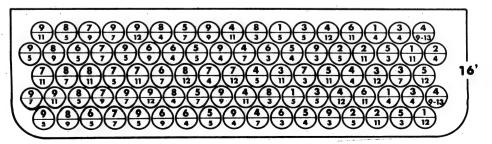
In order to avoid any mistake, make connections taking care that the positions of the pins are not inverted on the printed circuit board PA=287. On the printed board the positions are indicated by numbers1=7 and 8=14 while the corresponding pins of the IC can be found by placing the IC in such a position that figure reads from left to right $\P N=\pm$

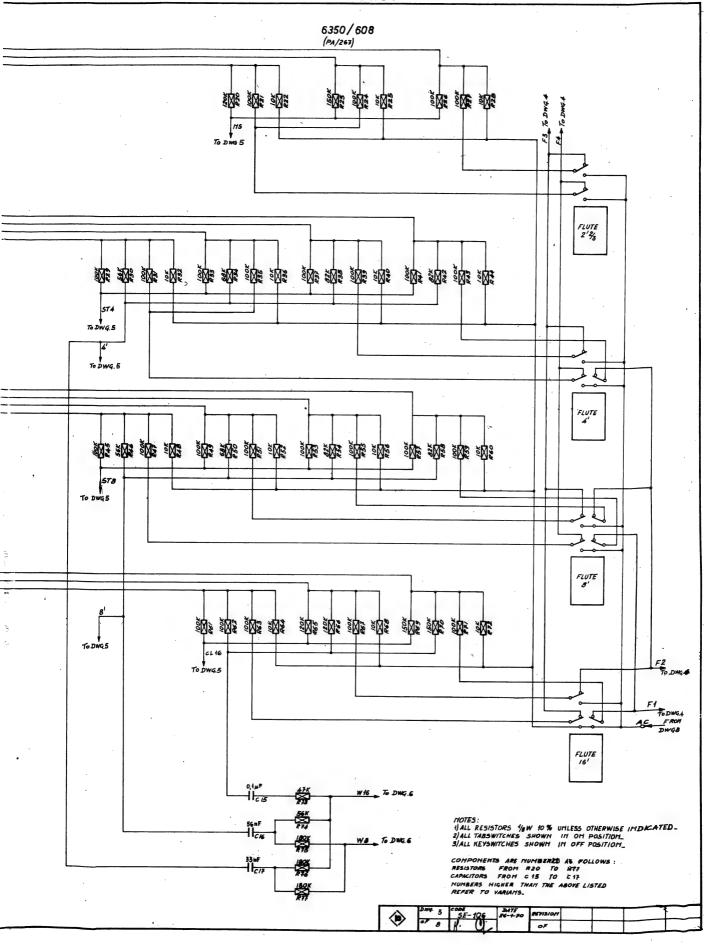
FAR-18 GN---

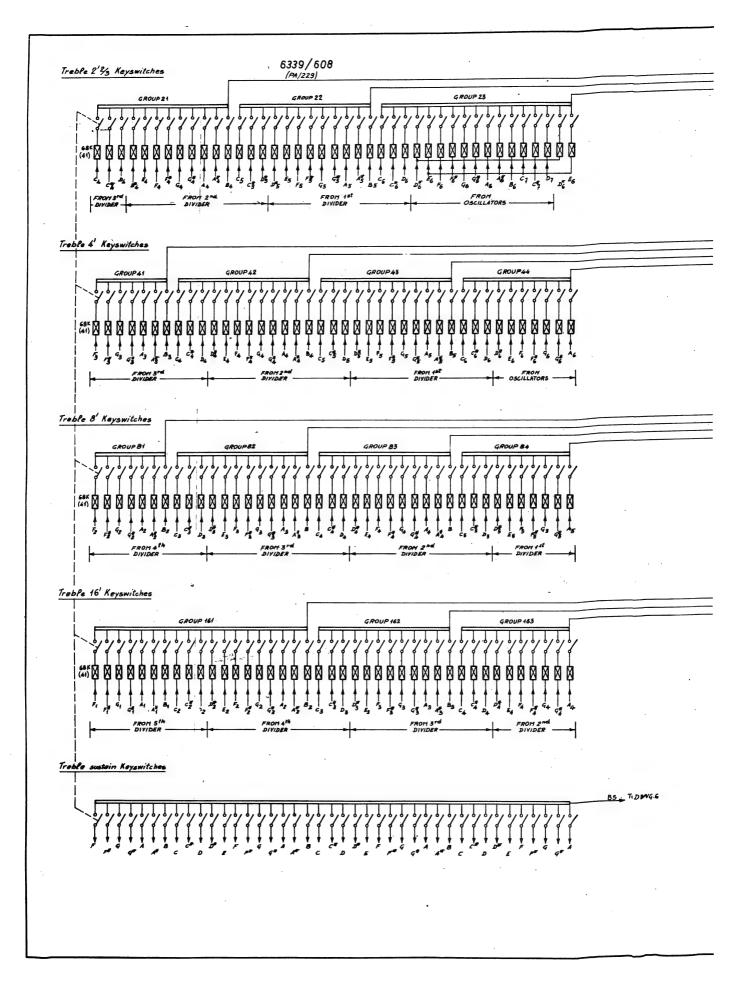


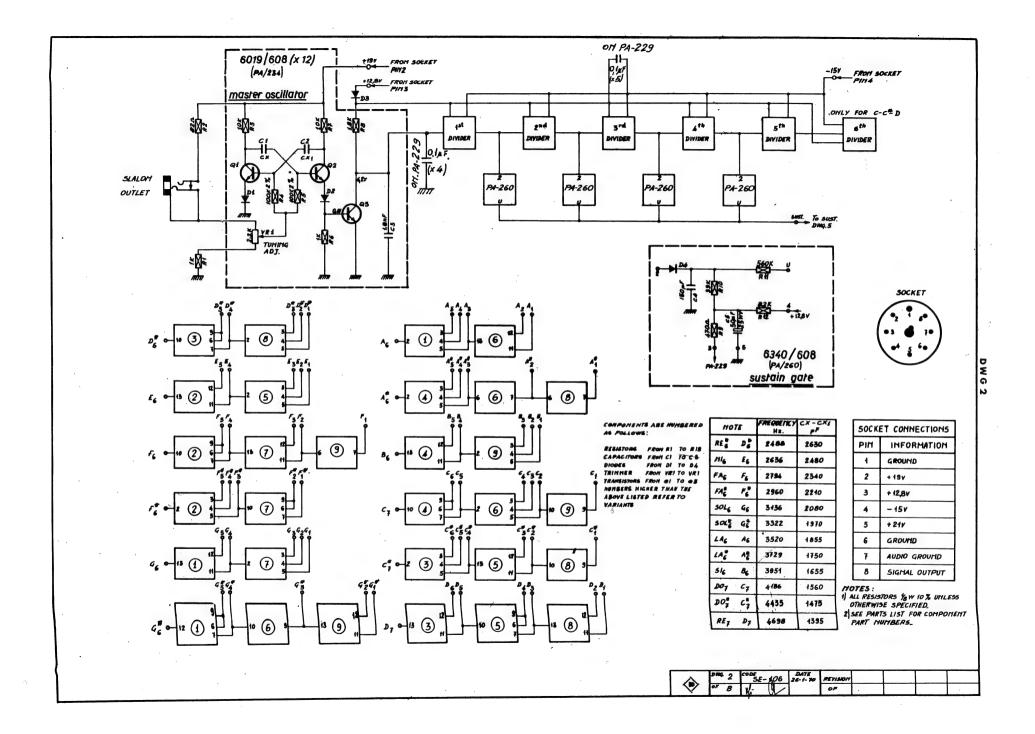




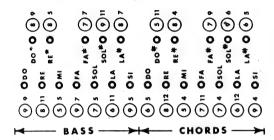








REFERENCE TABLE KEY to GENERATOR-BOARD



1, NOTE

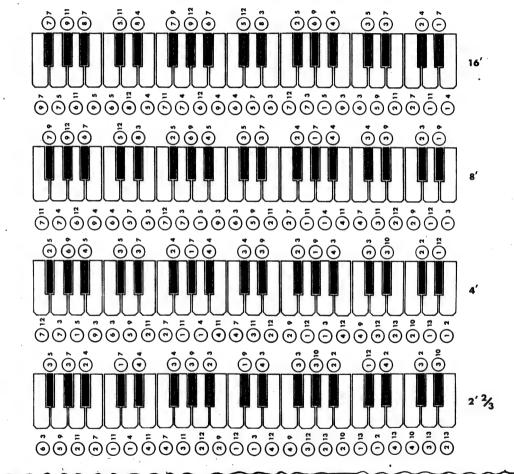
The tone generators referring to the notes of the keyboard are indicated with two numbers marked on the printed circuit PA=229. The circled number indicates the integrated circuit. The second one indicates the pin of the IC.

2. CONNECTION OF THE IC

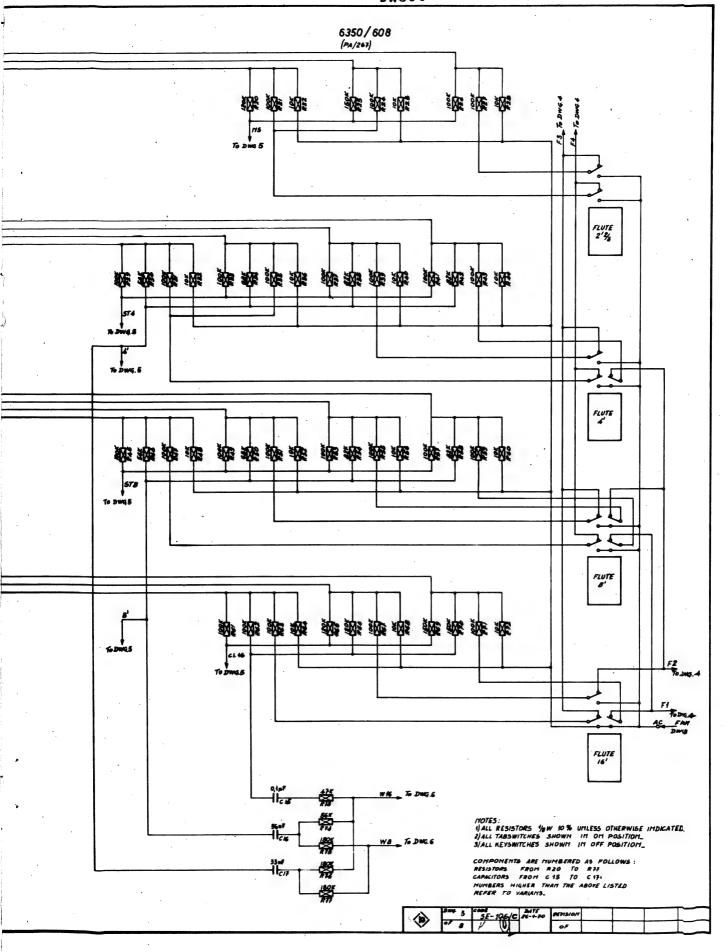
In order to avoid any mistake, make connections taking care that the positions of the pins are not inverted on the printed circuit board PA-229. On the printed board the positions are indicated by numbers 1-7 and 8-14 while the corresponding pins of the IC can be found by placing the IC in such a position that figure reads from left to right $\P N = --$

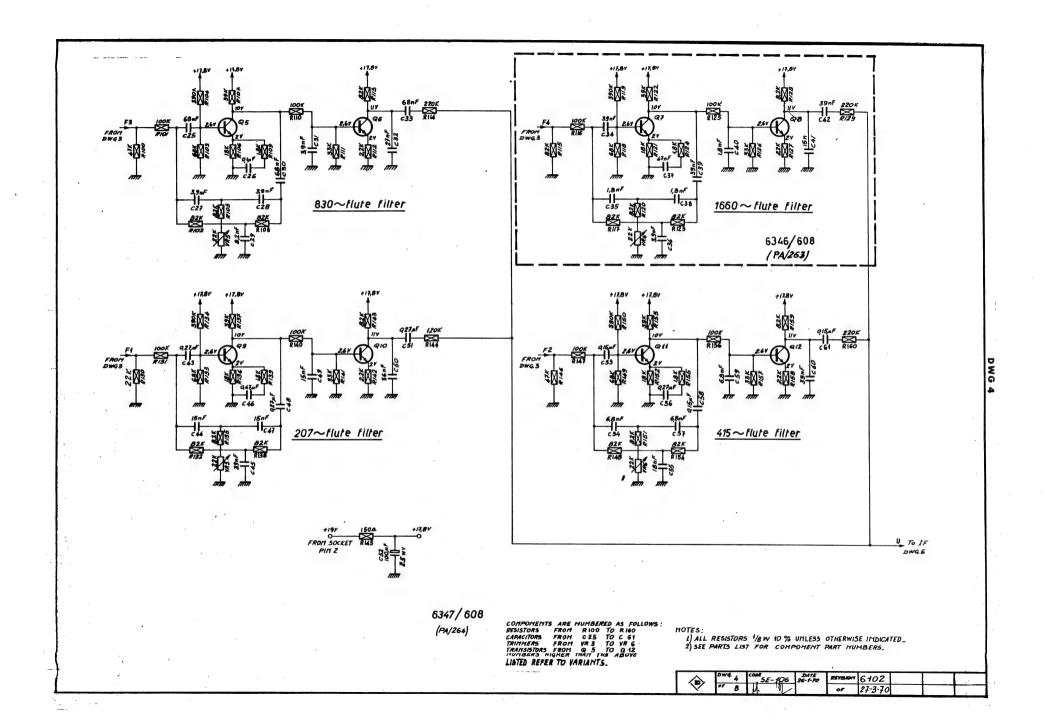


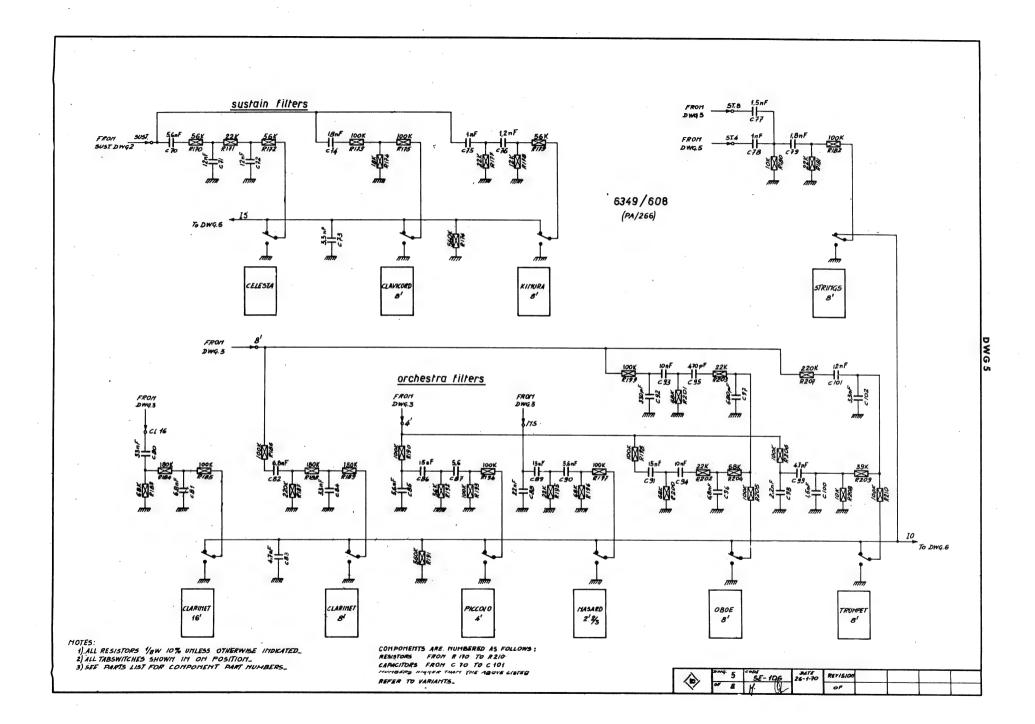
PRINTED CIRCUIT



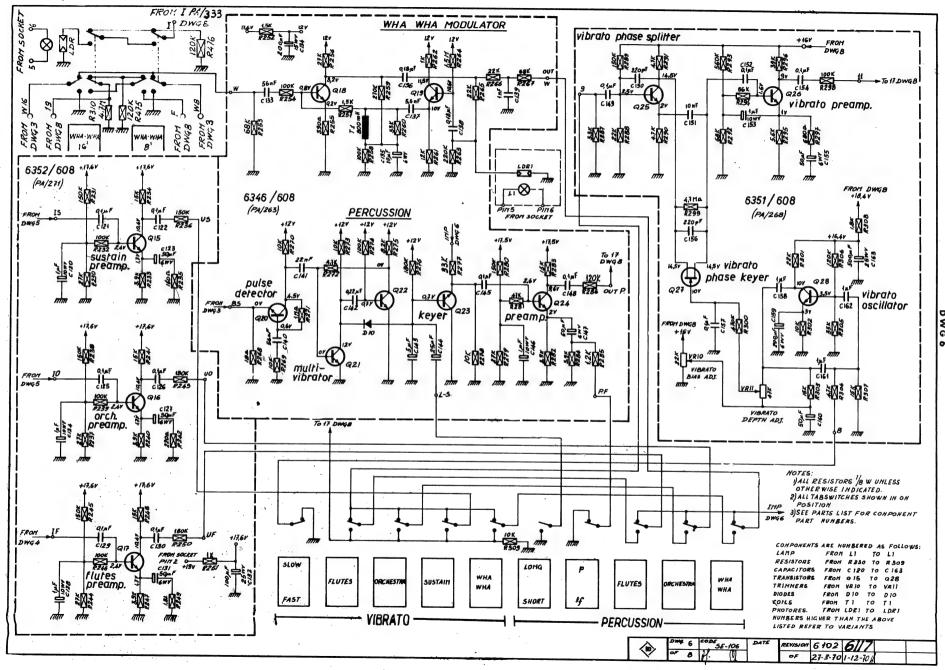


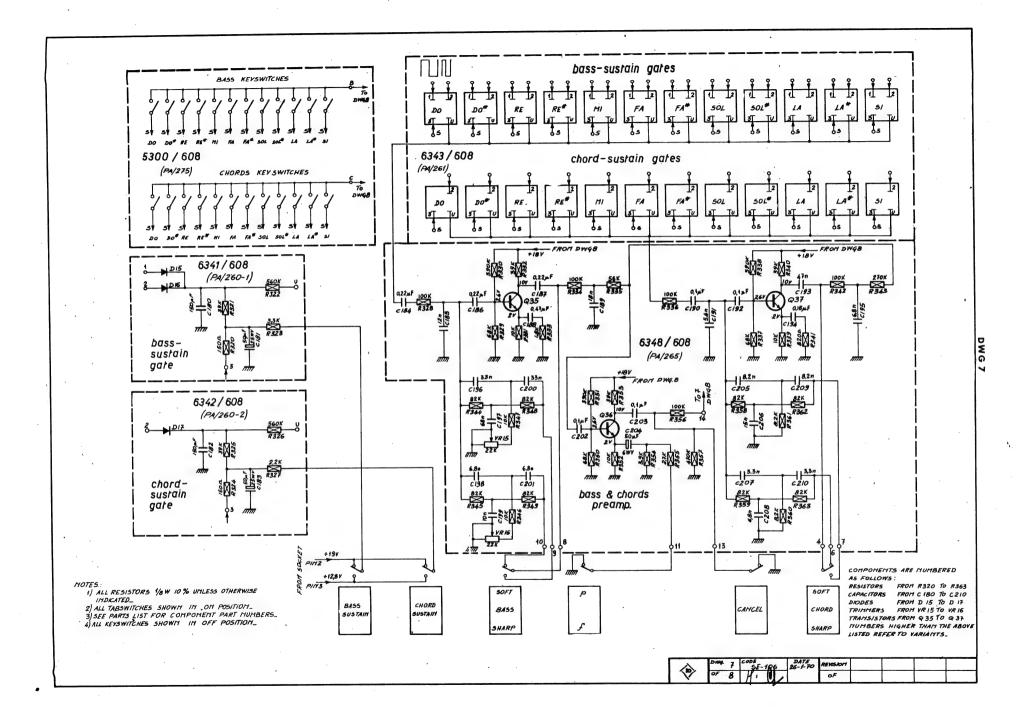


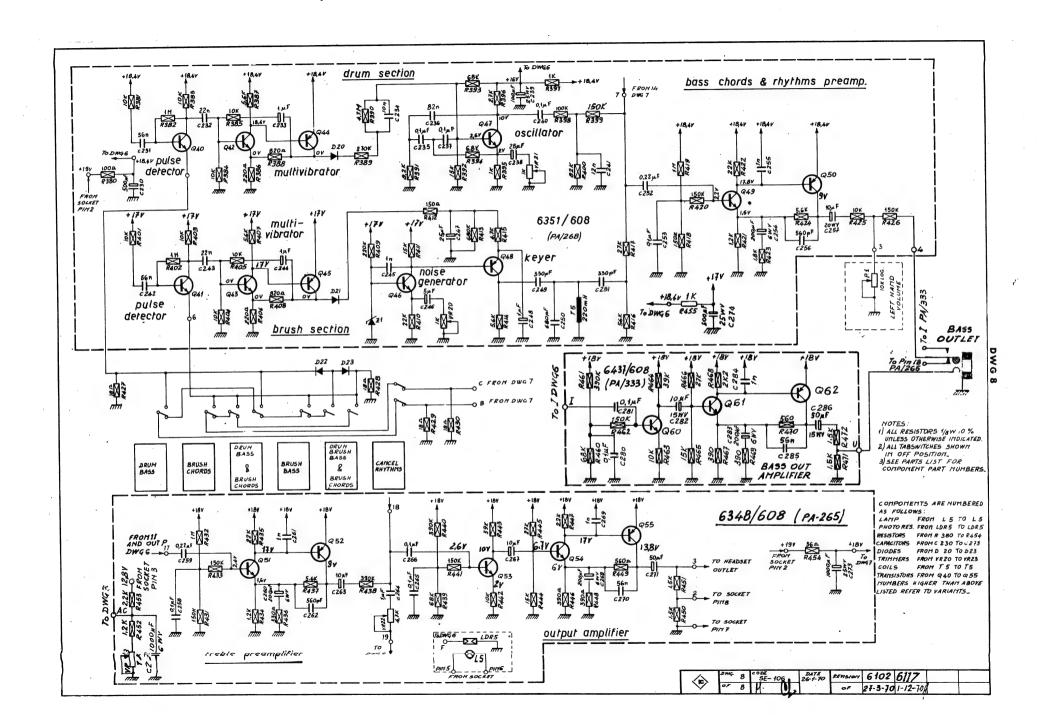


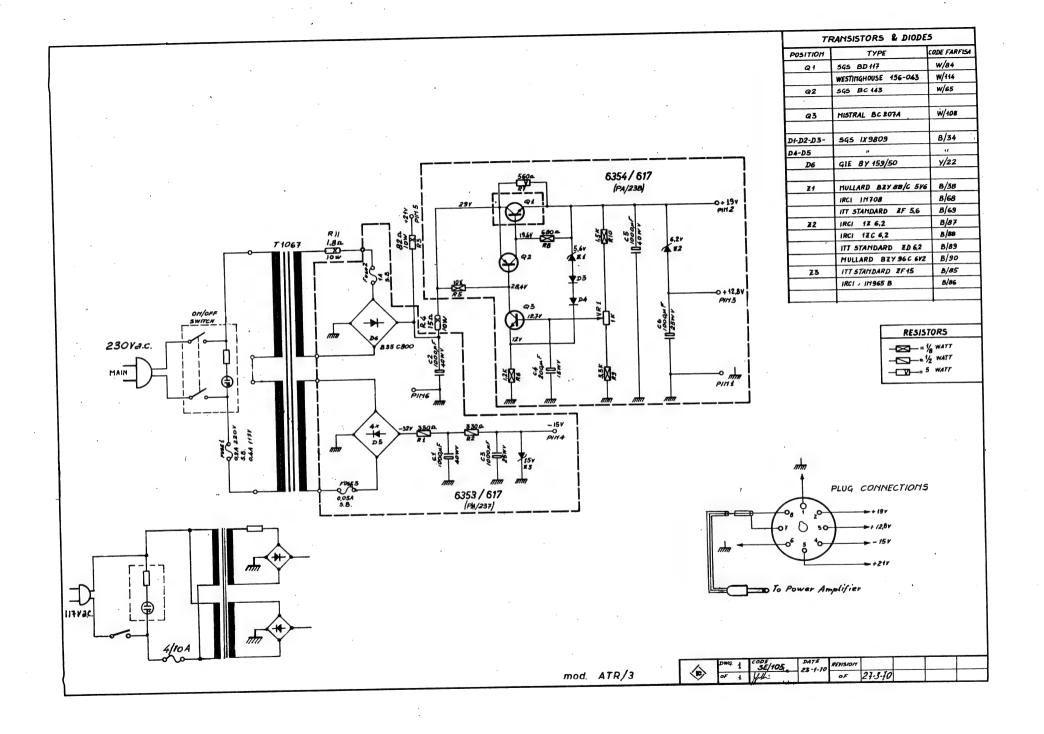












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PIANO Model 608: 41 notes, from F to A

BUTTON Model 634: 87 Buttons: DENMARK - SWEDEN

B U T T O N Model 635: 87 Buttons: NORWAY

BUTTON Model 636: 87 Buttons: FRANCE - HOLLAND

B U T T O N Model 638: 87 Buttons: BELGEN Charleroj and Bruxelles

SPECIFICATIONS

42 REGISTERS and CONTROLS

BASS - CHORDS SECTION: 120 Buttons

2 rows of Basses

4 rows of Chords

TREBLE REGISTERS

FLUTES 16' - 8' - 4' - 2/

Vibrato On/Off Percussion On/Off

ORCHESTRA Clarinet 16' - Clarinet 8' - Piccolo 4'

Nasard 2 / - Oboe 8' - Trumpet 8' - String 8'

Vibrato On/Off - Percussion On/Off

SUSTAIN Celesta 8' - Clavicord 8' - Kinura 8'

Vibrato On/Off

WHA - WHA 16' - 8' - Vibrato On/Off

Percussion On/Off

General Vibrato Slow/Fast Control Tab

General Percussion Long/Short Control Tab

General Percussion p/f (piano/forte) Control Tab

BASS - CHORDS SECTION

Basses Soft/Sharp Control Tab

Chords Soft/Sharp Control Tab

Bass Sustain On/Off Control Tab

Chords Sustain On/Off Control Tab

Bass Chords p/f (piano/forte) Control Tab

Cancel Tab for Bass and Chords

RHYTHMS ON CHORDS SECTION

Drum on Basses Control Register
Brush on Chords Control Register
Brush on Basses Control Register
Drum on Basses and Brush on Chords Control Register
Drum on Brush on Basses and Brush on Chords Control
Register
Cancel Control Register for all Rhythms

Rotating Control for general volume of Basses, Chords and Rhythms

OTHER GENERAL CONTROLS

General Volume Expression Control by use of the Bellows Socket for Headphones Sochet for Connection of the Slalom Pedal Sochet for Connection of the AT R/3 Power Supply Box

Dimensions: cm. $49 \times 21 \times 40$

Weight: kg. 11,5

Finish: Black

ADJUSTMENT

<u>VR.1 - OSCILLATORS TUNING</u> (35) on PA 234 = Tone Generator Board (34) Fig.7

Oscillators tuning is accomplished by the 12 potentiometers marked VR.1. Each potentiometer tunes all the notes of the same name throughout the organ, whichever tabswitch, octave, or keyboard be used. Tuning can be performed in any of the usual ways, such as setting A to the correct pitch by comparison to another instrument, or tuning fork, and then tuning the remaining notes by fifth and fourth, or using one of the many accessories such the "Strobotuner", or by comparison with another correctly tuned instrument or a set of 12 tuning forks.

VR.2 - VR.6 - FLUTE FILTERS TUNE on PA 264 = Board (19) Fig. 2 - 4 - 11 - 4A

Readjustment should not be necessary unless filter components are replaced; to adjust operate as follows: Connect an A.C. voltmeter or, preferably, an oscilloscope to the output jack of the organ, or, alternatively, to the speaker terminals of the power amplifier. Using only one flute tabswitch at a time and using only the even footages (16', 8', 4') play the note G. whose frequency is the one indicated beside the filter interested in the schematic diagram, and turn the corresponding adjusting trimmer for maximum output, or cleanest waveform on the oscilloscope.

<u>VR. 10 - VR. 11 - VIBRATO ADJ.</u> on PA 268 Board (33) Fig. 6 - 6A

This adjustment is very critical and should be performed only if absolutely necessary. Operate as follows: Set the three Vibrato tabswitches in the "ON" position, and play a chord in the central octave of the Keyboard with 8', 4' and Vibrato Tabswitches on the U.M. flute family included. Set VR.11 in its approximate central position, and turn VR.10 very slowly until some modulation is heard. At this point reduce modulation depth via VR.11 at the minimum which can be heard, and readjust VR.10 for the cleanest modulation. Eventually repeat until no further inprovement is obtained, always operating on VR.10 very slowly, since this adjustment is very critical, and correct in a very narrow tolerance. Now increase modulation depth via VR.11 up to the maximum clean modulation which can de obtained, just before "popping" occurs.

VR. 15 - BASS SOFT FILTER ADJ. on PA 265 = Board (32) Fig. 6 - 6A

Readjustment should not be necessary unless filter components are replaced; to adjust operate as follows; Connect an A.C. voltmeter or, preferably, an oscilloscope to the output jack of the organ, or, alternatively to the speaker terminals of the power amplifier. Play "G" on the bass section and turn VR.15 for maximum output, or cleanest waveform on the oscilloscope.

VR 16 - BASS SHARP FILTER ADJUSTMENT on PA 265 = Board (32) Fig. 6 - 6A

This trimmer controls the timbre when using "BASS SHARP" tabswitch, and can be set upon customer preference. Factory tuning is done centering the corrisponding filter on 400 Hz.

VR.20 - BRUSH LEVEL ADJ. on PA 268 = Board (33) Fig. 6 - 6A

Using "BASS SOFT", "CHORD SOFT", "DRUM BASS" and "BRUSH CHORDS" tabswitches, and alternating between a bass note and a chord note on the bass section, adjust VR.20 for adequate balance of the rhythm section.

VR.21 - DRUM LENGHTH ADJ. on PA 268 = Board (33) Fig. 6 - 6A

Put "BASS CANCEL" and "DRUM BASS" and "BRUSH CHORDS" tabswitches on and hitting repeatedly a note on the Bass section, adjust VR.21 for adequate length of the note heard, just below the position above which the note becomes boomy.

VR.22 - SWELL BELLOW MINIMUM LEVEL ADJ. on PA 265 = Board (32) Fig. 6 - 6A

Depending upon customer preference adjust this control for required level at completely closed bellow. Instrument is factory adjusted with VR.22 at the center of its rotation.

VR.23 - + 5.6 VOLT ADJ. "ANTICLICK" on PA 265 = Board (32) Fig. 6 - 6A

Adjust for proper voltage on + 5,6 test point (pin 15 of PA 265) using an ART 3 power supply whose operation and adjustment is known to be correct, or the customer's own unit.

HOW TO OPEN THE INSTRUMENT FOR SERVICE ACCESS

(Any work inside the organ shall be performed by specialized technicians)

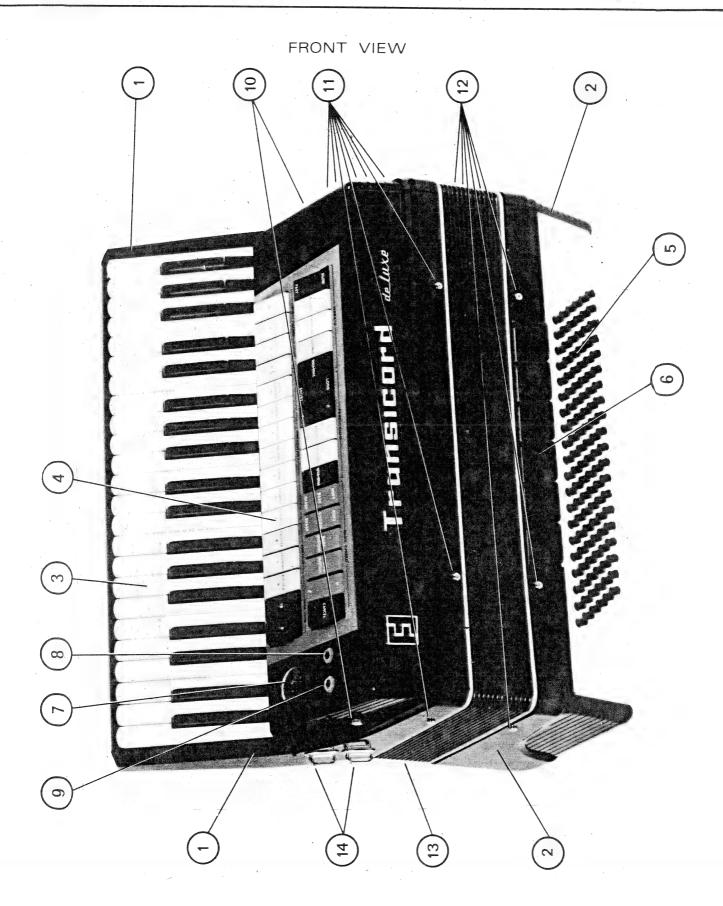
- 1. To open the instrument as shown in fig. 1.2.3.4.5.6.7.8. and to remove the Treble & Bass Case:
 - 1.1 Unloose the eight screws (11 in Fig.1.4.16) and remove both Treble (1) and Bass Case (2).
 - 1.2 Disconnect the Expression and WhaWha connector (44/24 in Fig.2.3.4.8.9) and Wiring connectors (22/23 in Fig.2.3.4)
 - Note! When removing the Treble & Bass Case the instrument may still be played and circuitry checked, provided that all Duo-Tyne connectors (22/23)&(44/24) are properly connected.

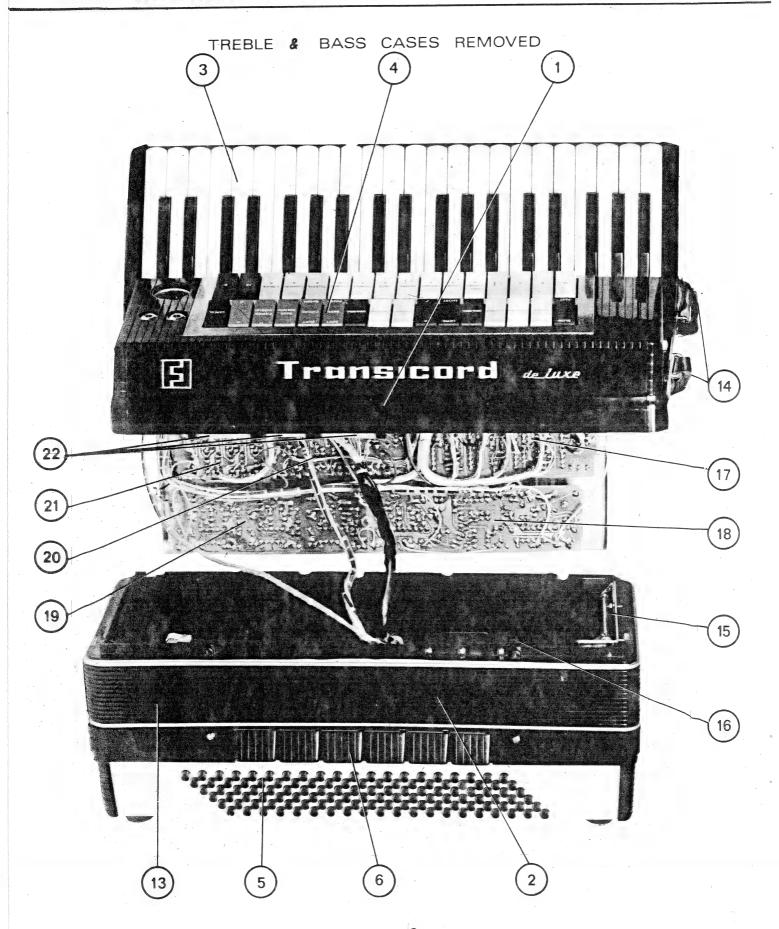
 If Duo-Tyne connectors need be removed you may only play the Keyboard.
 - Operations # 1 allow reaching the components or performing adjustments as follows:
 - a) Tuning Trimmers VR 1 (35 in Fig. 7) located on Tone generator boards PA 234.
 - b) Printed Circuit boards PA 261 and PA 261-1 and their treble Sustain modules PA 260 (38-39 in Fig.8.12).
 - c) Printed Circuit board PA 263-1 (18 in Fig. 2.4.10)
 - d) Printed Circuit board PA 264 (19 in Fig. 2.4.11)
 - e) Flute Filters adjust. VR 3. VR 4. VR 5. VR 6 (Fig. 2.4.10.11)
 - f) Printed Circuit board PA 266 (13 in Fig. 2.4.13)
 - g) Printed Circuit board PA 267 (17 in Fig. 2.4.14)
 - h) Printed Circuit board PA 271 (21 in Fig. 2.4.15)
 - i) Bass Case Wiring Duo-Tyne connectors (22/23 in Fig. 2.3.4)
 - 1) Expression and Wha-Wha device (16 in Fig.2.3)
 - m) Expression and Wha-Wha device connector (44/24 in Fig. 2.3.4.8.9)
 - n) Printed Circuit board PA 261-2 with Sustain modules PA 260-1 and PA 260-2 (25-26 in Fig.3.12)
 - o) Printed Circuit board PA 275 or PA 288 or PA 289 (27 in Fig.3)
 - p) Bellows Fastener (15 in Fig.2.3)
 - q) Bellows (13 in Fig. 1.3.16)
- 2. To open the instrument as shown in Fig.5 (separation of Treble & Bass Case not needed)
 - 2.1 Unloose both Grille holding screws (10 in Fig. 1) to reach:
 - a) Register Tabs (4 in Fig. 1.2.5.6.16)
 - b) Power octal socket (7 in Fig. 1.5.6.16)
 - c) Headphone Jach (8 in Fig. 1.5.6.16)
 - d) Slalom Jack (9 in Fig. 1.5.6.16)

- 3. To open the instrument as shown in Fig. 6.6A
 - 3.1 Unloose both Grille holding screws (10 in Fig.1)
 - 3.2 Unloose the tab metal frame holding screws (30 in Fig.5)
 - 3.3 Tilt the tab metal frame (29 in Fig.5.6)

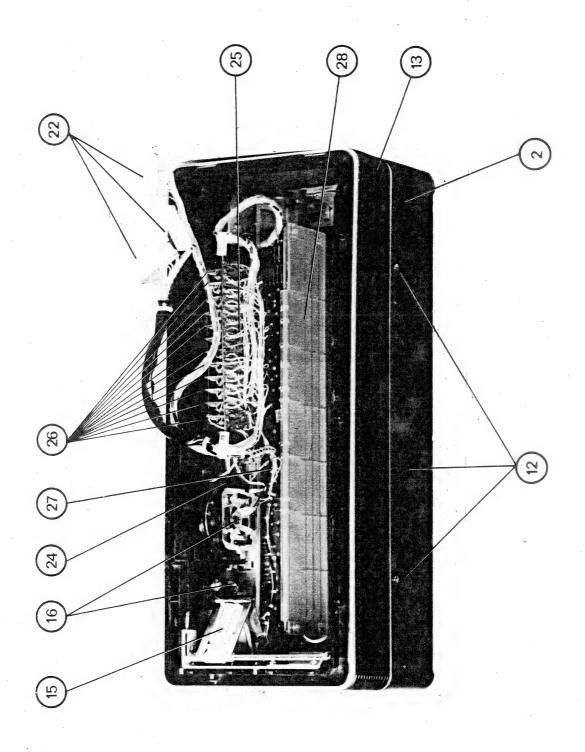
Operations #3 allow reaching components or performing adjustments as follows:

- a) Tabswitch Board (4 in Fig. 1.2.5.6.6A.16)
- b) Power octal socket (7 in Fig. 1.5.6.16)
- c) Headphone Jack (8 in Fig. 1.5.6.16)
- d) Slalom Jack (9 in Fig. 1.5.6.16)
- e) Printed Circuit board PA 265 (32 in Fig.6.6A)
- f) Bass Filters adjust. VR 15, VR 16 (Fig. 6.6A)
- g) Output Level adjust. VR 22
- h) Anticlick adjust. VR 23.
- i) Printed Circuit board PA 268 (33 in Fig.6.6A)
- 1) Vibrato Bias adjust. VR 10
- m). Vibrato Depth adjust. VR 11
- n) Brush Level adjust. VR 20
- o) Drum Level adjust. VR 21
- 4. To open the instrument as shown in Fig. 8.9.17.18 (separation of Treble & Bass Case not needed)
 - 4.1 Remove Treble Case back cover (37 in Fig.7) to reach:
 - a) Treble Keyswitches (48)
 - b) Contact Actuator balance springs (49)
 - c) Lowerside of the Treble contact board PA 229 or PA 287 (46 in Fig. 9.17.18)
 - 4.2 Remove screws (42) holding the Treble Keyswitch metal frame (41) and tilt the same to reach:
 - a) Printed Circuit board PA 229 or PA 287 (46)
 - b) I.C. Dividers (47)
 - c) Key's or Button's Lever (45)

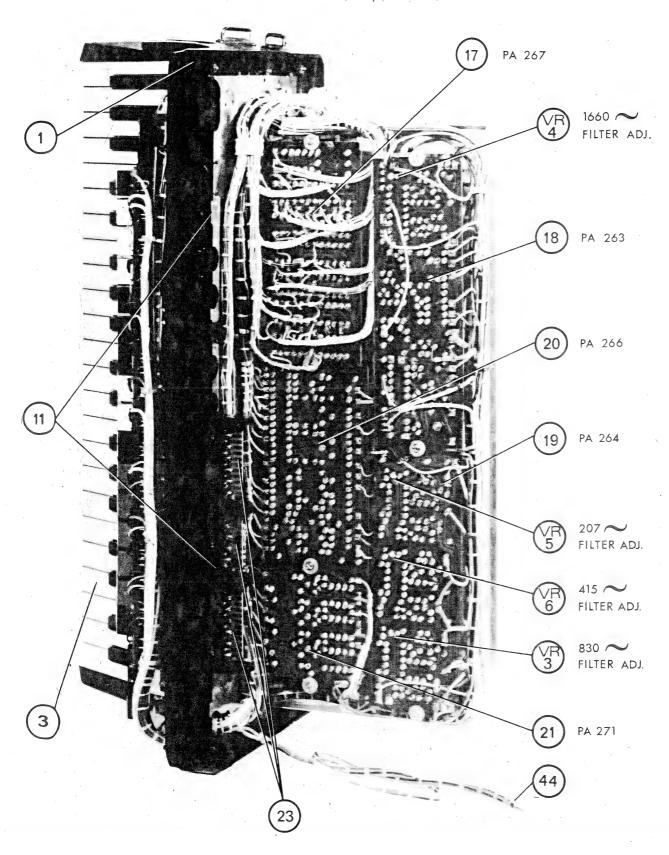




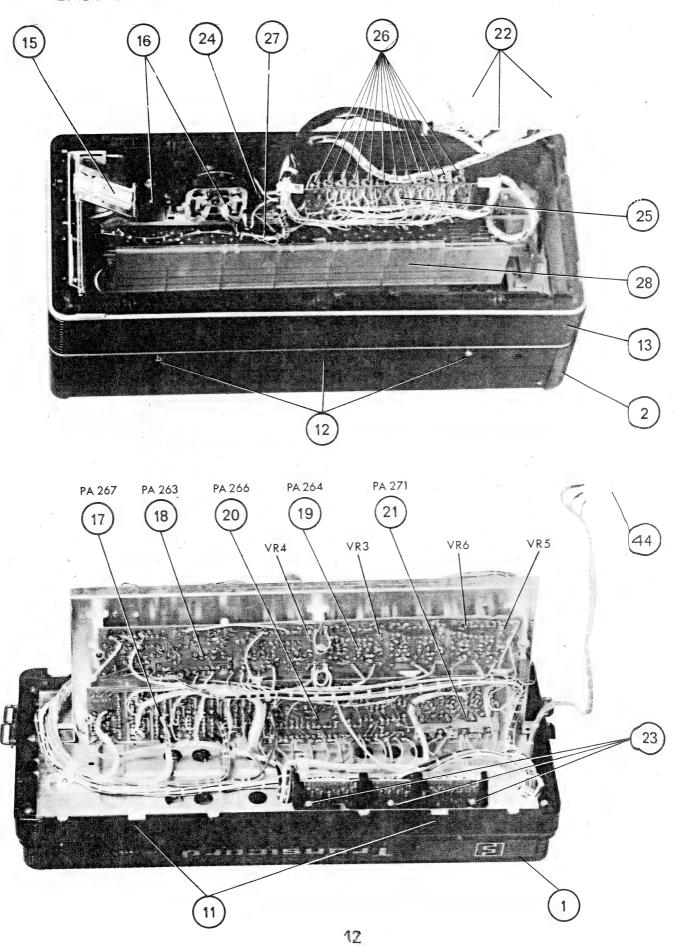
BASS CASE (Inside view)

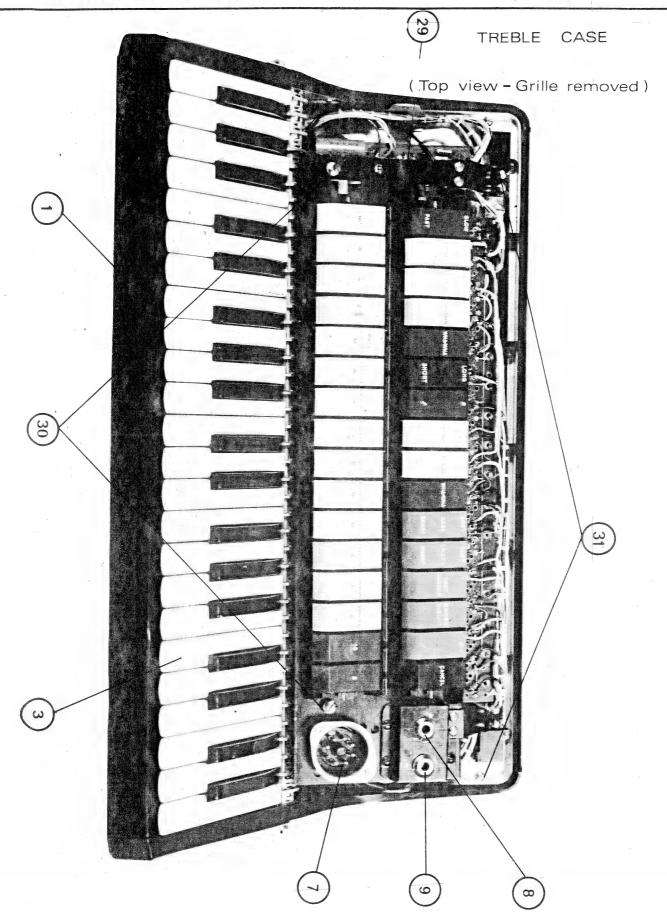


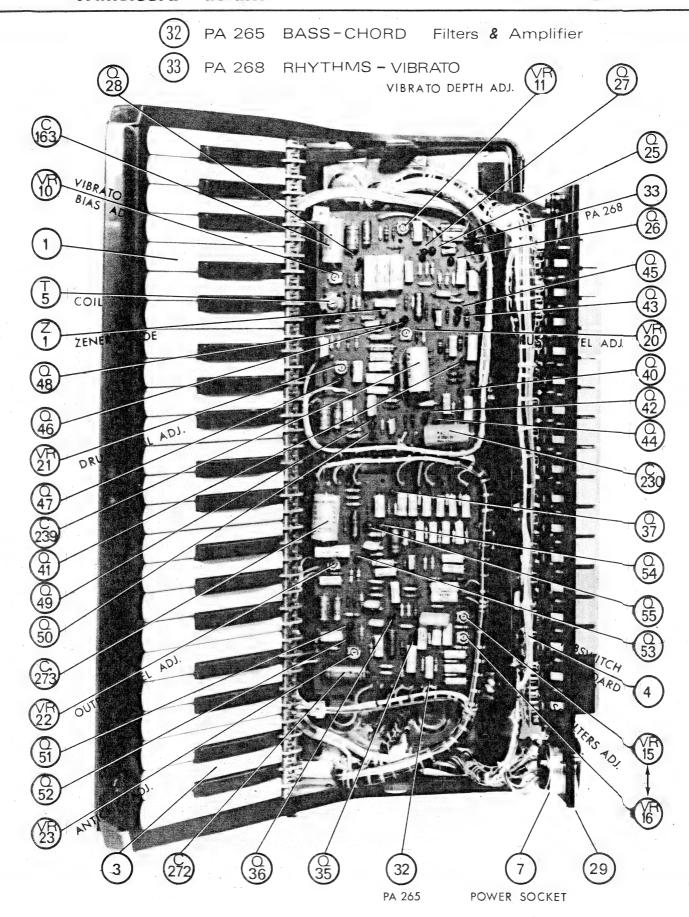
TREBLE CASE (Top view)

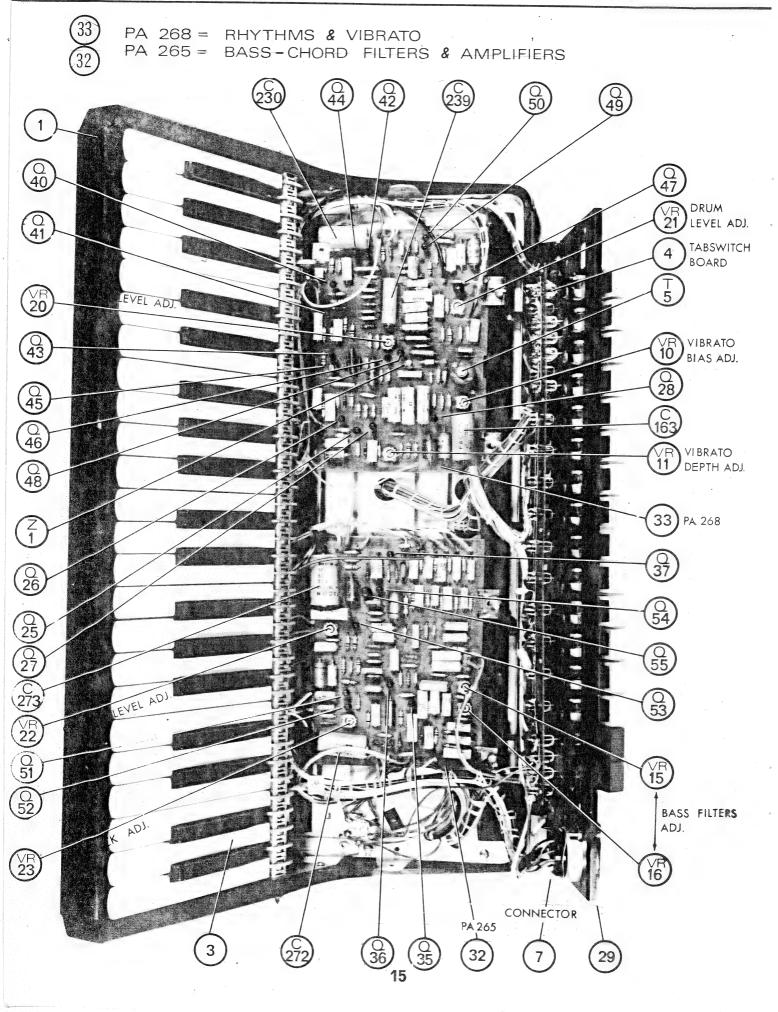


BASS & TREBLE CASES



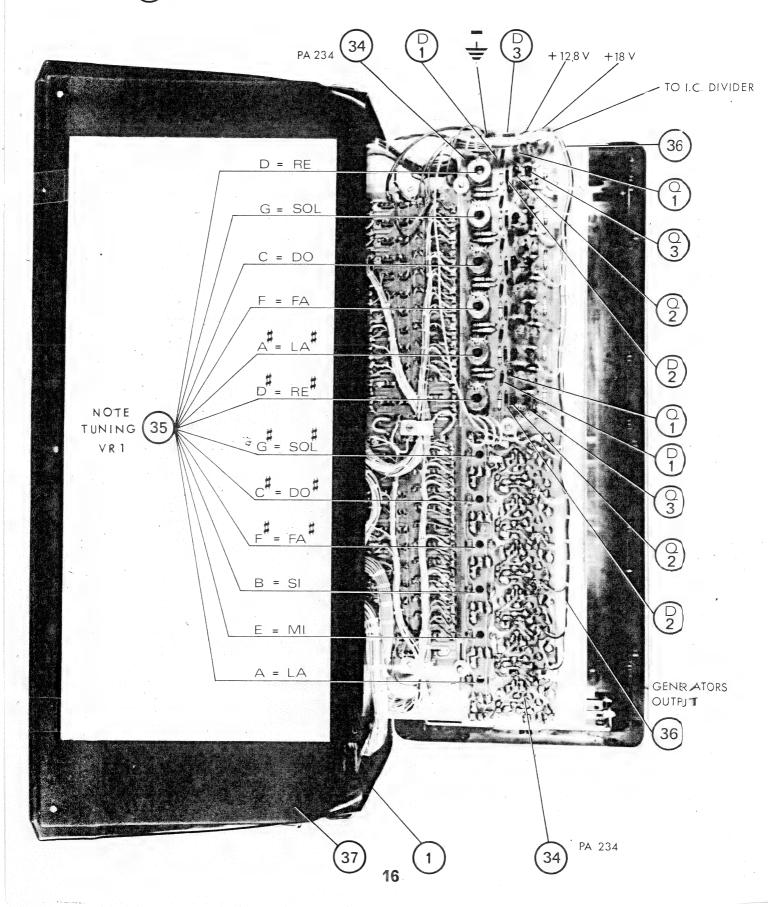


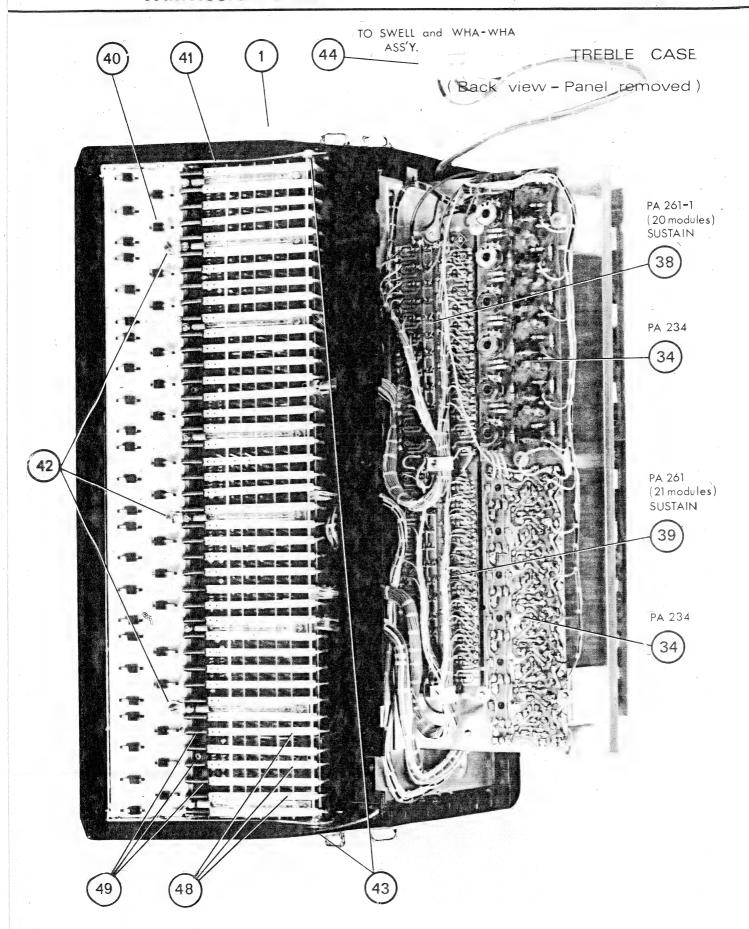


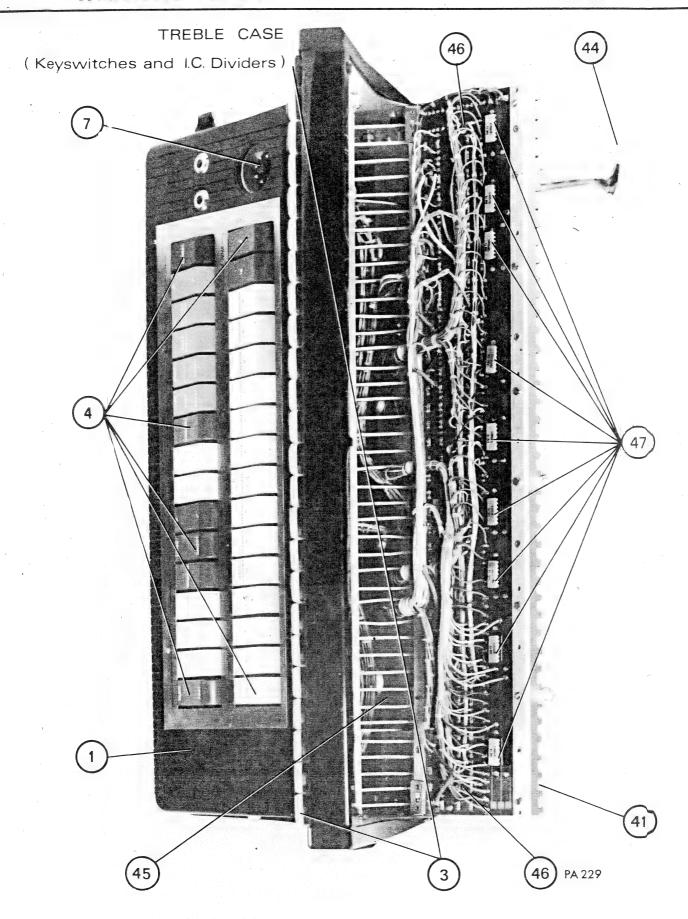


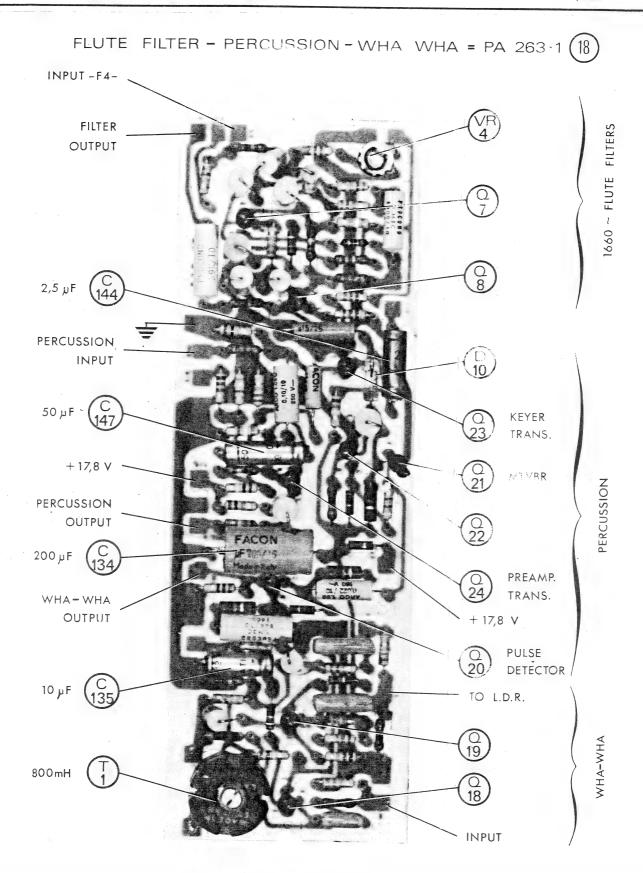
TREBLE CASS (Back view)

(34) PA 234 - Generator Boards

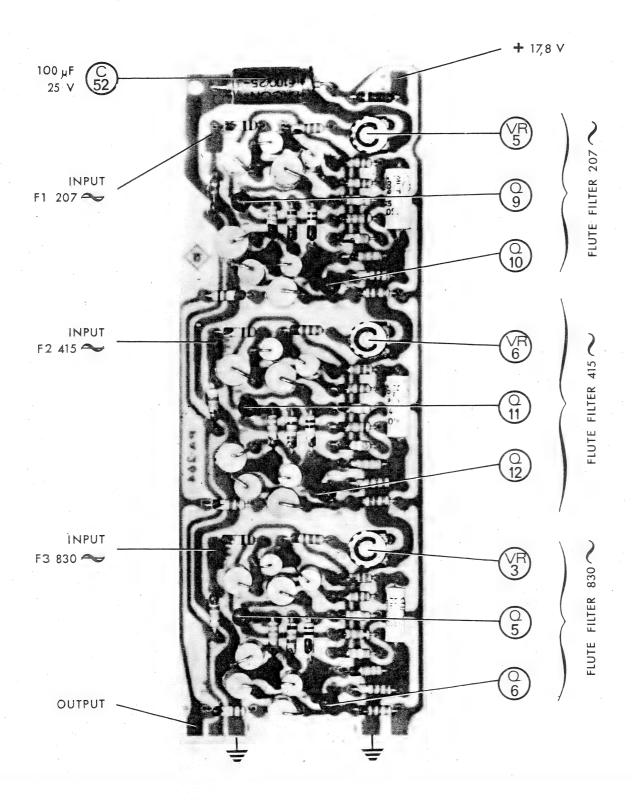








PA 264 = FLUTE FILTERS

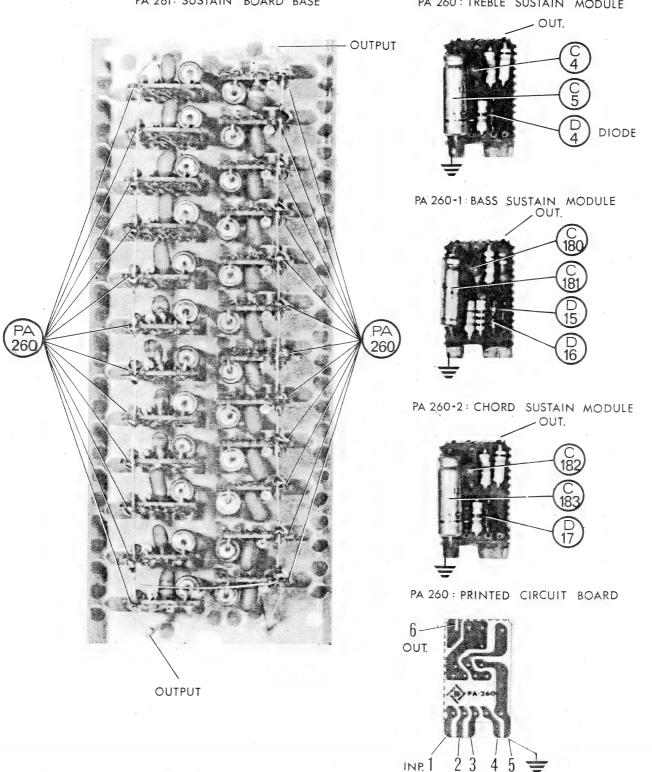


PA 261 TREBLE SUSTAIN wiht 21: PA 260 = TREBLE SUSTAIN MODULES PA 261-1 TREBLE SUSTAIN wiht **20**:PA 260= " "

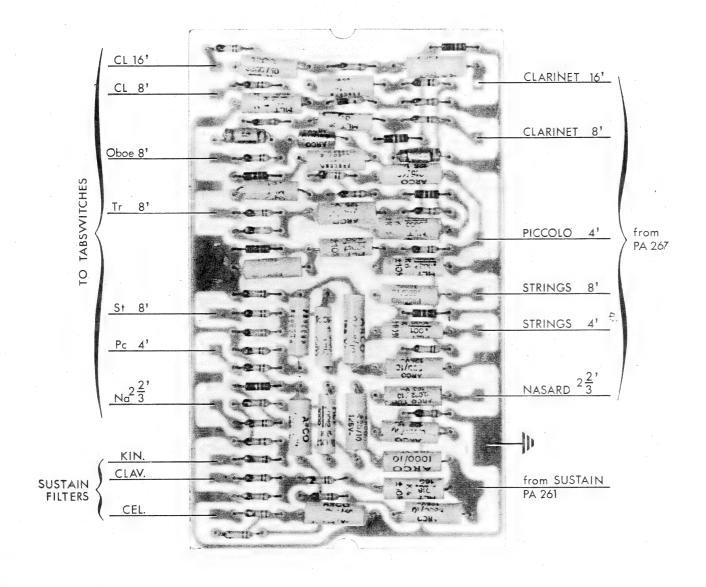
(12: PA 260-1=BASS "

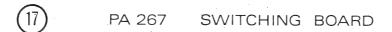
PA 261: SUSTAIN BOARD BASE

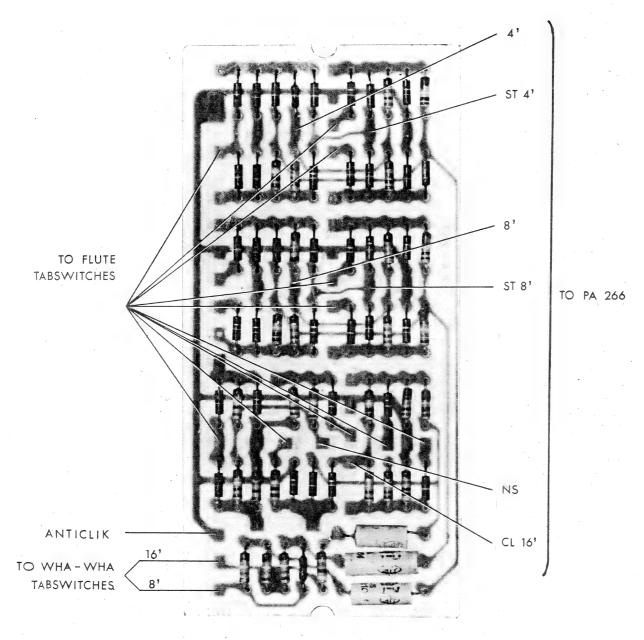
PA 260 : TREBLE SUSTAIN MODULE



20 PA 266 SUSTAIN - ORCHESTRA FILTERS BOARÐ---







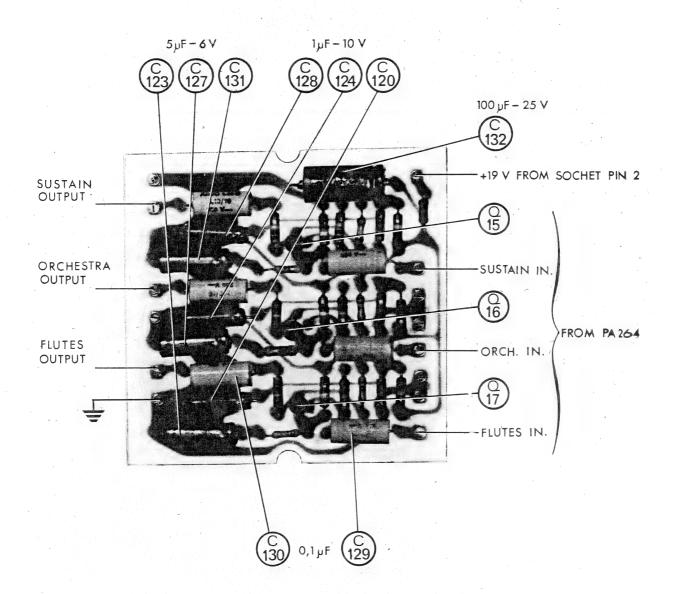
Points listed below are connected to PA 229/a

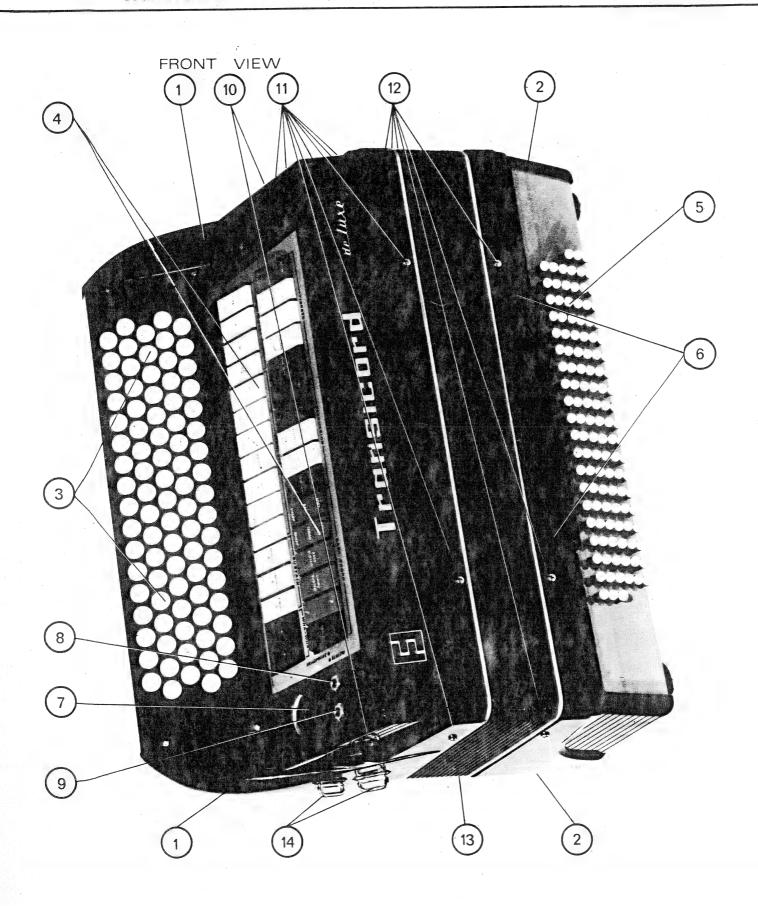
21 - 22 - 23

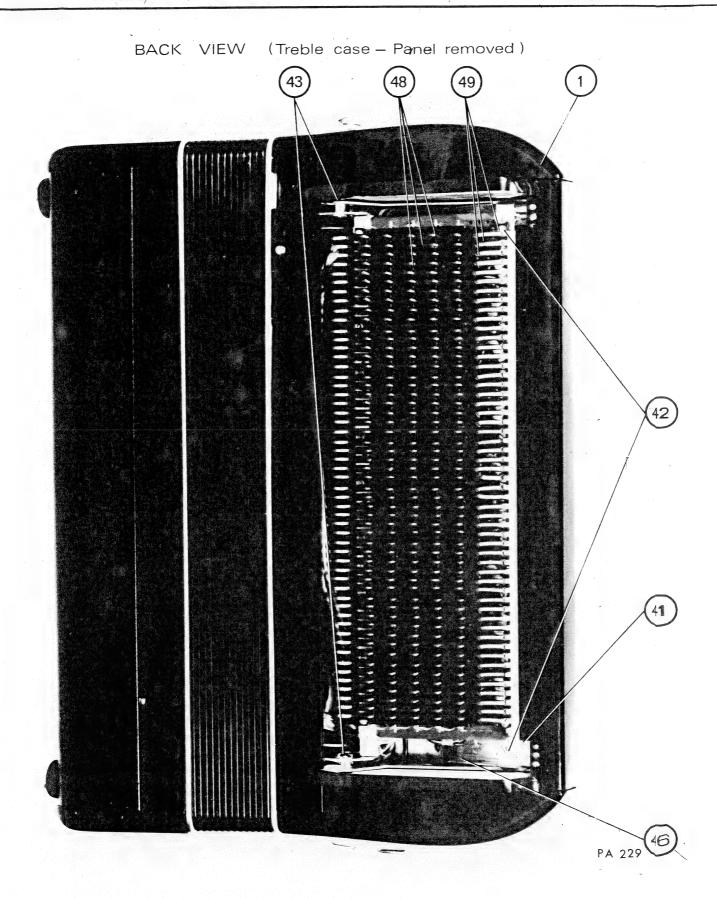
41 · 42 · 43 · 44 81 · 82 · 83 · 84

161 - 162 - 163

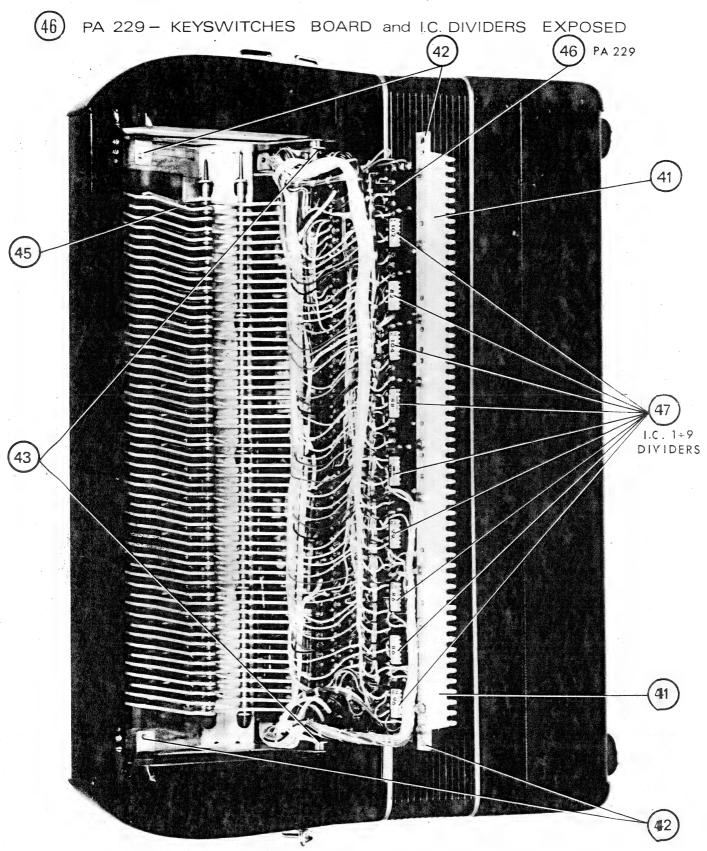
21) PA 271: SUSTAIN, ORCHESTRA & FLUTES PREAMPLIFIER BOARD



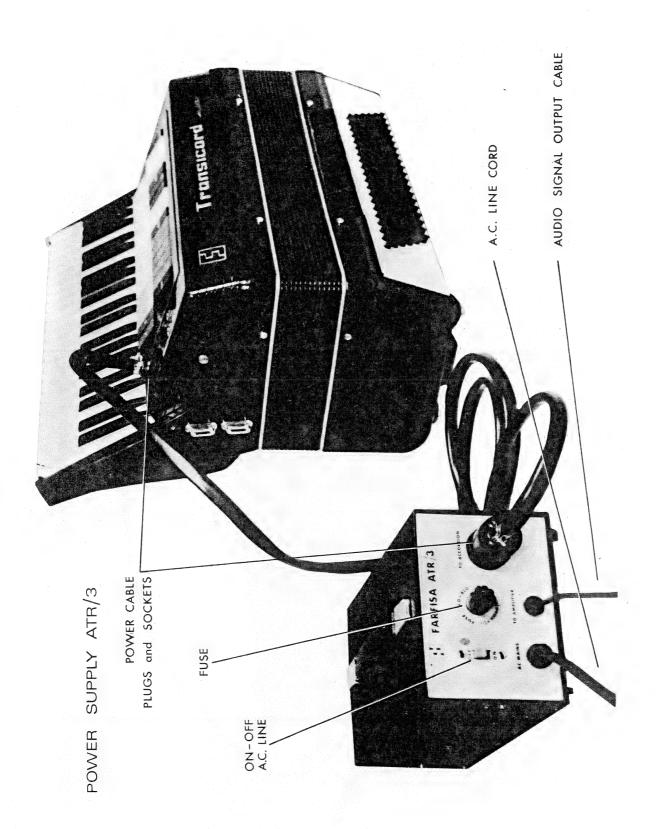


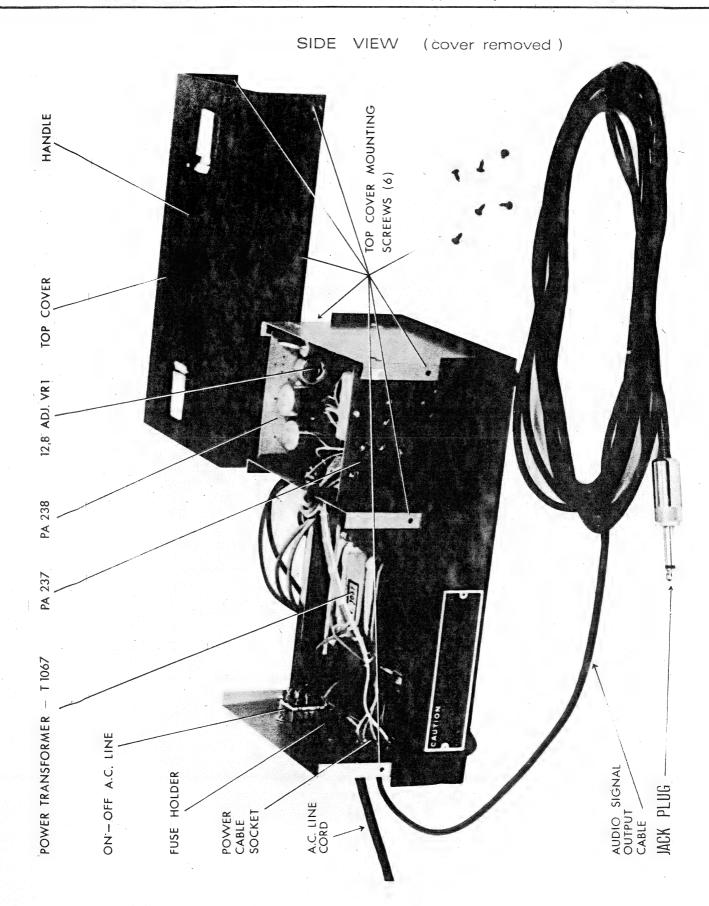


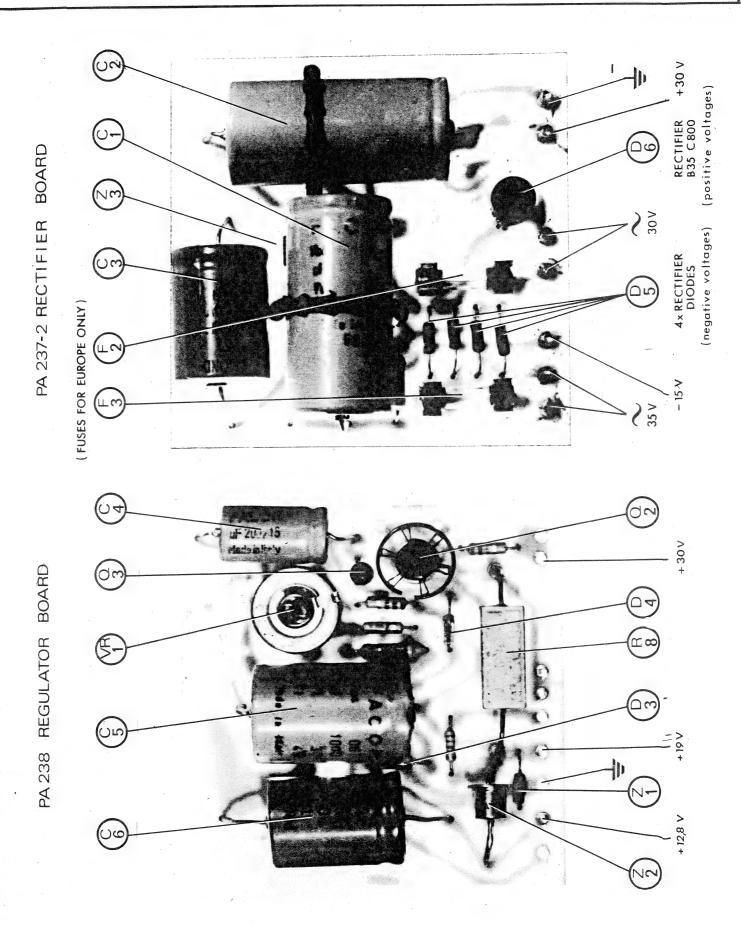
BACK VIEW (Panel removed)



FRONT VIEW







PARTS INFORMATION

STANDARD PARTS

Replacements for all standard electronic parts and hardware can be purchased directly from local suppliers generally in less time than would be required to obtain them from the factory.

SPECIAL PARTS

In addition to the standard replacement parts, special electronic parts and mechanical parts are also used. These parts are manufactured by and to the specifications of the factory. Order these parts directly from the factory since they would be difficult or impossible to obtain from other sources.

PARTS ORDERING INFORMATION

When ordering parts be sure to include the following information:

- 1. Model and Serial Number.
- 2. Part Code
- 3. A description of the Part.
- 4. Specify how you want the part shipped.

Most special electronic parts and mechanical parts will have a part number stamped on them. In the event that the part number is missing, or you are unable to read the part number, a complete description of the part and where it is used will allow the factory to fill your parts order.

When parts are ordered in the proper manner the factory is able to fill your orders promptly, delays that might result are avoided.

PARTS LIST

THE PARTS LIST contains the following information:

- 1. Name of Part.
- 2. Brief Description.
- 3. Where the Part is found (figure, number).
- 4. Schematic reference.
- 5. PART CODE.

The parts list includes all standard stock replacement parts. No attempt has been made to include every nut, bolt, screw, resistor, and capacitor. If the necessity for a non-listed part arises, please write describing the parts location and function as well as model and serial number of the unit.

IMPORTANT! In any correspondance concerning this instrument ALWAYS INCLUDE MODEL AND SERIAL NUMBERS.

SERVICE NOTE

Beginning from serial N° A/6117 the following modifications have been introduced:

- 1) Headphone jack (item 8 in fig. 1.5.6.16) has been delated, and in its place a separate Bass output has been intrudoced, to allow separate amplification for the treble and bass sections.
- 2) Inside the treble section of the instrument, supported by the tabswitches metal chassis (item 20 in fig. 5.6) a new board "Bass outpout amplifier" has been added. This board amplifies the signal for the above mentioned "Bass output" jack (item 8)
- 3) The following items have been added to the "Transistors & diodes list":

Schem.Ref.	Circuit	Drawing Ref	Туре	Part Code
PA 333	BASS OUTPUT A	MPLIFIER board (DWG 8	- SE/100)	
Q 60 Q 61	Input Preamp. Output Amplif	Fier NPN	00 B or C red dot	W 143 - 148 W 145 - 150
Q 62	Output Amplif	Fier PNP SGS E	C 116	w 80

* MISTRAL

Tra	ansicord deluxe		PARTS L	IST
Part	Description	(No) & Fig.	Part Code	Part Code
			PIANO MODEL	BUTTON MODELS
TREBLE CASE A	ASSEMBLY	(1) Fig. 1-2-16-17	*3000/608	*3000/634
Straps Holder Plate Grille Strip Strip Panel Panel Panel Cover TREBLE KEYSWI	Shoulder Straps	models only	MASFI/57 PT/7-C PS/121-C *2010/608 FI/267 FI/266 CZ/52 CZ/51 DO/40 *3100/608	MASFI/57 PT/7-C PS/121-C *2010/634 FI/267 FI/266 *2501/634 *2502/634 FI/291 FI/292 DO/41
Keys Keys Actuator Bar Spring Spring Spring	Octave, Natural, C through E Top A - White Sharp - Black Keyswitch, plasic 470 mm Key contact Natural Keys balance Sharp Keys balance	(48) 8	*TS/156/162-B *TS/165-B *TS/37-N PS/990 BR/288 ML/176 ML/221 ML/222	
TREBLE KEYSWI	ITCH ASSEMBLY (for BUTTON mo	odels only)(3) 16-17		*3100/634
Button Button Felt Stem Levers Lever Lever Lever Lever Spacer Plate Actuator Spring Spring Spring	Treble, White, with felt rateble, Black, under button Button, Long size, 1st & 4 Button, med.size, 2nd & 5th Button, med.size, 2nd row, satton, short size, 3rd row, satton, cut type, 4th row Lever spacer tube Button board with holes Key contact Button Keys balance, 1st row Button Keys balance, 2nd row Button Keys	th row 18 a row 18 asingle type 18 only 18		*BT/76 *BT/77 GZ/383 GM/45 *LV/358/361 *LV/359/362 *LV/359/S *LV/360 *LV/363 BC/52 SU/747 PS/1217 ML/176 ML/222 ML/230
	•	ow		•

_				
l ra	nsic	nrd:	qel	uxe

PARTS LIST

Part	Description	(No)	& Fig.	Part Code
TREBLE TABSWITC	H ASSEMBLY (for PIANO & E	BUTTON models)	(4) 1-2-5-6-16	%4000/608
Actuator		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•
Spring	Tabswitch; Black plastic Tabcontact		6-6A	PS 1104
Spring	For Actuator		6-6A	ML 329
Tab		מינות	6-6A	ML 178
Tab	** · · · · · · · · · · · · · · · · · ·		(4) 1-2-5-16	CA/97 - 25
Tab	*	ght grey		$\frac{600}{600}$ CA/97 - 26
Tab			11 11 11 11 11 11 11 11 11 11 11 11 11	*CA/97 - 27
Tab		ght green	и и и и и	CA/97 - 28
Tab		rk green rk red		CA/97 - 29
Tab.			ti ii ii ii ii	%CA/97 - 30
Tab		rk grey		*CA/97 - 31
Tab		rk grey	п пппп	*CA/97 - 32
Tab		rk grey	- M	*CA/97 - 33
Tab		rk grey	The first that the	*CA/97 - 34
Tab		rk grey	11 11 11 11	*CA/97 - 35
Tab		ack	и и и и и	*CA/97 - 36
Tab	•	ght grey	11 11 11 11 11	%CA/97 - 37
Tab		ght grey		*CA/97 - 38
Tab		ght grey		*CA/97 - 39
Tab .		ght grey	и и и и и и и и и и	*CA/97 - 40
Tab				*CA/97 - 4I
Tab				*CA/97 - 42
Tab				CA/97 - 43
Tab				
Tab				*CA/97 - 45
Tab				**CA/07 - 14
Tab			и и и и	°CA/07 - 15
Tab		ght green	THE THE THE TENE	*CA/97 - 46
Tab		ght green		*CA/97 - 47
Tab		ght green	II II II II	*CA/97 - 48
Tab		rk green	11 11 11 11 11	*CA/97 - 49
Tab		rk green	11 11 11 11 11	*CA/97 - 50
Lever		rk green	_ 11 11 11 11	$\frac{\text{CA}}{97} - 51$
Connector	Under Tab		(m) a w a/	LV/301
Recessing	Shell for Octal plug conne		(7) 1-5-16	1/12[
Jack	Socket for Headphone and S		(7) 1-5-16	I/122
Ring		-	(8-9) 1-16	RRSS — 7
Connector			(8-9) 1-16	DD - 29
Connector	Duo Tyne - 9 Flag contacts O Contact P C board for Pr		(44) 4–8	I - b
	9 Contact P.C. board for Du 12 Contact P.C. board for Du		(23) 4	PC - a / 2
Support		,	(23) 4	PC - a 1/1
_	for P.C. board connectors connectors		(23) 4	SU - 436
Connector	octal plug (male) with car		19	×2110/608
Connector	octal socket (female) with ear		10	$I 121 \div 71$
	TOTAL SECTION (TEMALE) WILL	Loups 101 Cabi	le 19	I 120 + 71

Part.

Description

PARTS LIST

Part Code

(No) & Fig.

	BASS CASE AS	SEMBLY (for PIANO & BUTTON)	models) (2)	1-2-3-16	*5000/608
	Panel	Upper, Right side panel			FI/271
	Panel.	FF 7 O			, ,
	Panel	, ,			
	•				1 - 6
	Panel				
•		~			, , , -
	Panel	•			* * * * * * * * * * * * * * * * * * * *
		Bass Case complete with feet			
	Feet	For bass cover, complete with			•
	Clip	· -			
	-			*********	, ,
	Sign Tab	Rhythm control complete			
		Rhythm control tab balance.			
	+	Rhythm tabswitch assembly			
		Duo - Tyne for P.C 9 flag			
	Connector	Duo - Tyne for P.C12 flag			
	Connector	buo - Tylle 101 F.C12 11ag	Concacs (22	., 2-3-4	
	STRAP	Wrist strap	• • • • • • • • • • • • • • • • • • • •		*MAN - 1
	•				
•	BASS & CHORDS	KEYSWITCH ASS'Y Fig. 3-3A	Schem.Ref. D	WG 7	,
	a)- PIA	NO and BUTTON models:/634 (Da	anmark,Swede	(n) $& /635$ (Norway)	
	Assembly	Bass & Chords Keyswicthes wi	th PA 275 (2	7) 3-3A DWG 7	*5200/5300/608
	Board	PA 275 = complete (with spring			*5300/608
	Spring	Chords contact - complete			
	Spring	Bass contact - complete			
		Plastic Chords contact rail			PE 22
	Button	Bass button			PI - 1
	Actuator		,		
	Spring				ML - 205
	-				the state of the s
	BULLON	CHOTH DUCCOH			• • FI - 4
	Button Actuator				
	Actuator	Major and diminish chords co	ntact		AR - 3 1
	Actuator Actuator	Major and diminish chords co Minor chords contact	ntact		AR - 31 AR - 32
	Actuator Actuator Actuator	Major and diminish chords co Minor chords contact Seventh chords contact	ntact	• • • • • • • • • • • • • • • • • • •	AR - 31 AR - 32 AR - 33
	Actuator Actuator Actuator Spring	Major and diminish chords co Minor chords contact Seventh chords contact Chord buttons balance	ntact		AR - 31 AR - 32 AR - 33 ML - 206
	Actuator Actuator Actuator Spring	Major and diminish chords co Minor chords contact Seventh chords contact	ntact		AR - 31 AR - 32 AR - 33 ML - 206

PARTS LIST

Part Desc

Description

(No) & Fig. Part Code

Part Code

DELOG C	One	ACDO ICI	JIDWITOH	AUU	T T	-8.J-Ju	ochem.Ker	· DWG	/		
	b)	- BUTTO	ON models	only:	636	(France	e,Holland)	and:	638	(Belgium, Charle	eroi, Bruxelles)
								•			

ard PA 288 complete with springs	÷5200/5300/63	
ard PA 288 complete with springs		16
	÷5300/636	**********
sembly Bass & Chords Keyswitch with PA 289	•••••	*5200/5300/638
ard PA 289 complete with springs		*5300/638
	PI - 3	PI - 3
	AR - 55	AR - 57
	ML - 232 .	ML - 232
	PI - 4	PI - 4
	AR - 56	AR - 58
	AR - 59	AR - 59
	AR - 62	
tuator Major Chords contact		AR - 60
	AR - 70	AR - 61
	BT - 78	BT - 78
	, ,	
LLOWS ASSEMBLY Fig. 3 (for PIANO & BUTTON models)		Part Code
sembly. Bellows complete with Expression device(13) 3	• • • • • • • •	*7000/608
llows Bellows only (without Expression device) " "	•••••	*7000/30/608
s'y Expression Device complete (16)	•••••	*7010/11/608
otocell LDR for the Expression device	•••••	H1 = H2
mp 24 V - 3W for Expression device " "	• • • • • • • •	L 12
otofilm Photofilm plate for Expression	• • • • • • • •	DI/63
sk Turn plate for Expression " "	*******	DI/28
sk Upper and Lower plastic plate " "	• • • • • • • •	DI /31
ate Expression run " "	•	PS/533
ring 40 + 2 turns	••••••	ML/210
ring Expression device balance springs " "	• • • • • • • •	ML/212
pport Lamp Holder support " "	•••••	SU/432
ate Lamp negative contact plate " "	• • • • • • • •	CO/13
ate Lamp positive contact plate " "	••••	CO/24
P.C. Board - PS 532 for Duo Tyne connect. (24)3-3A		PS/532

		Transicord	deluxe		PRINTED	CIRCUIT	BOARDS	LIST
	Part	Desc	ription	(No)	& Fig.	Schem.Ref.	Par	rt Code
	PA 229 PA 287	TREBLE KEYSWI	TCHES with I.C. Dividers	(46-	47) 8, 9 17, 18	<u>DWG 2 - 3</u>		
•	Board	ø	complete with I.C. socket for Piano model only	(46)		PA 229	*633	39/608
	Board Socket		complete with I.C. socket for Button models onlyders (14 pin)	(46) (47)	18 9, 18	PA I.C.1 ÷ 9	*639 1/	97/634 117
	PA 234	TONE GENERATOR		(34)		DWG 2		
,	Board Board		Generators - complete (D-G-C-F-A#-D# note) Generators - complete	(34)	7-8	PA 234	•	19/608 – D
	Trimmer	Pot. 2,2	(G#-C#-F#-B-E-A- note) Kohm - Tuning -	(34) (35)		PA 234 VR 1	*60 : P/6	19/608 - G
	PA • 261	SUSTAIN ASSE	<u>BLY</u> (25–26–	38-39)	3-8-12	DWG 2 - 7		
	Board	PA 260 -	Treble Sustain Module, comp	o.Fig.	12	PA 260	*632	10/608
	Board	PA 260-1	Bass Sustain Module, comple	ete "	12	PA 260-1	*632	11/608
	Board	PA 260-2	Chord Sustain Module, comp	• 11	12	PA 260-2	*632	12/608
	Board .	PA 261	Treble Sustain Assembly with 21 PA 260 module	(39)	8-12	PA 261	*632	13/608
	Board	•	Treble Sustain Assembly with 20 PA 260 module		8-12	PA 261-1	*63 4	14/608
	Board	PA 261-2	Bass and Chords Sustain As with 12 PA 260-1 module and 12 PA 260-2 module	ss'y (25)	3-12	PA 261-2	* 63 ∠	1 5/608
	Board	PA 261+4	Treble Sustain Assembly with 24 PA 260 module For BUTTON models only				*63	98/634
	PA 263	FLUTE FILTER .	- WHA WHA - PERCUSSION ASS	'Y(18)	2-4-10	DWG 4 - 6		
	Board	PA 263	Complete	(18)	2-4-10	PA 263	*63 4	1 6/608
	Coil	800 mH		Fig.	10	T 1	*1	40 33
	Trimme	Pot. 22	Kohm - 1660 Hz Filter Adj.	Fig.	10	VR 4	P /3	24
	PA 264	FLUTE FILTER	S 207 - 415 - 830 Hz	(19)	2-4-11	DWG 4		, 1
	Board		Complete	(19)	2-4-11	PA 264	*63 -	47/608
•	Trimme	Pot. 22	Kohm - Flute filters Adj.	(19)	2-4-11	VR 3 - 5 -	6 1/3	24

Transi	cord deluxe		PRINT	ED CIRCUIT	BOARDS LIST
Part D	escription	(No)	& Fig.	Schem.Ref.	Part Code
•			•	-	
PA 265 BASS - CI	HORDS FILTERS and AMPLIFIERS	(32)	6-6A	DWG 7 - 8	
Board PA	265 - Complete	(32)	6-6A	PA 265	*6348/608
Trimmer Pot	t. 1 Kohm Anticlick Adj. (+5,6)		6-6A	VR 23	P/8
	t. 4,7 Kohm = Output level Adj. t. 22 Kohm = Bass soft and		6-6A	VR 22	P/37
	Sharp filters Adj.		6-6A	VR 15 - 16	P/24
PA 266 SUSTAIN -	ORCHESTRA FILTERS	(20)	2-4-13	DWG 5	
Board PA	266 - Complete	(20)	2-4-13	PA 266	*6349/608
PA 267 SWITCHING		(17)	2-4-14	DWG 3	
Board PA	267 - Complete	(17)	2-4-14	PA 267	*6350/608
PA 268 RHYTHMS	& VIBRATO ASS'Y	(33)	6-6A	DWG 6 - 8	
Board PA	268 - Complete	(33)	6-6A	PA 268	*6351/608
Coil 220	mH		6-6A	T 5	T/4011
Trimmer Pot	. 1 K- Brush & Drum Level Adj.		6-6A	VR 20-21	P/8
	. 22 Kohm - Vibrato Adj.		6-6A	VR 10	P/24
Trimmer Pot	. 47 Kohm - Vibrato Adj.		6-6A	VR 11	P/34
PA 271 SUSTAIN	AMPLIFIER	(21)	2-4-15	DWG 6	
Board PA	271 - Complete	(21)	2-4-15	PA 271	*6352/608
PA 275					
PA 288 BASS &	CHORDS KEYSWITCHES	(27)	3-3A	DWG 7	
PA 289					
Board PA	275 - Complete with contact				
	springs or PIANO and BUTTON models			•	
	608, 634 and 635	(27)	3-3A	PA 275	*5300/608
Board PA	288 - Complete with contact			- , J	30-4/ 500
	springs				
f	or BUTTON model 636	(27)	3-3A	PA 288	*5300/636
Board PA	289 - Complete with contact				
2	springs or BUTTON model 638	(27)	0.04	DA 000	VEDDO 1600
1	or porton moder 030	(4/)	3-3A	PA 289	*5300/638

	Tran	sicord	deluxe		CAPACITORS LIS	ST
μF	WVDC 1	PRINTED BOA	ARDS REFERENCE	(No) & Fig.	Drawing Ref.	Part Code
ELECT	ROLYTIC					
1 .		PA = 263 = PA	A 268	6-6A-10	4 - 6 - 8	C 41
5		-	A 268		4 - 6 - 8	C 1030
10	9		A 268		4 - 6 - 8	C 1009
25	•	_	268		4 - 6 - 8	C 1012
50	-	_	$A \ 265 = PA \ 268 \dots$		4 - 6 - 7 - 8	C 1002
50	_	_			2 - 7	C 81
100	3		271		6 - 8	C 92
100					4	C 93
200		•	265		4 - 6	C 1057
500					6 - 8	C 1039
500					. 2	C 42
1000	-				7 - 8	C 1000
1000					7 - 8	C 1041
		n 205				•
POLYE	STER FILM					
0,1	200 V.	PA 229/287	= 263 = 264 = 265	5 = 6 - 9 - 10 - 11	2 - 3 - 4	a #0.6
-,2 -			$68 = 271 \dots$		6 - 7 - 8	C 526
0, 15		•	65		4 - 7 - 8	C 525
0, 18		•	68		4 - 6 - 8	c 608
0,22		-	65		4 - 6	C 549
0,27		_	64		4 - 6	C 527
0,47				and the second s	4	C 528
1			$65 = 268 \dots$		4 - 6 - 7 - 8	C 157
MT NT A	12.		YESTER FILM			
		7				
~	200 V 10	% PA 26	$5 = 268 \dots$, 6-6A	6 - 7 - 8	C 602
0,056	200 V "		$3 = 265 \dots$		4 - 6 - 7 - 8	C 620
0,1	200 V "		5		7 - 8	C 151
0, 18	200 V "		3		4 - 6	C 608
0,22	200 V "		$5 = 268 \dots$		6 - 7 - 8	C 606
0,47	200 V "		5		7 - 8	C 61 6
1	250 V "	PA 26	$4 = 265 = 268 \dots$	11-6-6A	4 - 6 - 7 - 8	C 157
POLYC	ARBONATE	FILM			·	
330	125· V 10	% PA 26	6	13	5	C 53 6
470	125 V "		6	13	5	C 53 7
560	125 V "		5 = 268	6-6A	6 - 7 - 8	C 58 2
680	125 V "		$6 = 268 \dots$		5 - 6 - 8	C 512
CERAM	_					
		d ====================================	0 - 060 1 - 060	- 2 12	2 - 7	C 23.3
150	125 V 10		0 = 260 - 1 = 260		6 - 8	C 53.5
220	125 V "		8		6 - 8	C 53.6
330	125 V "	PA 26	8	••• 0-0A	0 - 0	0 350

Tra	ansicord d	eluxe	TRANSISTORS & DIODES LIS	ST
Schem.Ref.	Circuit	(No) & Fig.	Туре	Part Code
PA 229	TREBLE CONTACT	BOARD (46-47) Fig	.9 (for PIANO model only	•)
1.C. 1+9	Integrated fre	quency divider	••••••	W 127
PA 234	TONE GENERATOR	(34) Fig. 7	· 	a a second second
Q 1 Q 2 Q 3	Mybtr. Master	Oscillator	2N 5172	W 126
D 1 D 2	Base breakdown	protection	SGS IX 9809	B 34
D 3	Threshold		PAE R/6	B 18 B 51
PA 260	SUSTAIN MODULE	(38-39) Fig. 8-	<u>12</u>	**************************************
D 4	Sustain gate		SGS IX 9809	В 34
PA 260-1	BASS SUSTAIN M	ODULE (25) Fig. 3-	12	
D 15 D 16	Sustain gate		SGS IX 9809	В 34
PA 260-2	CHORD SUSTAIN	MODULE (25) Fig. 3-	-12	
D 17	Sustain gate		SGS IX 9809	
PA 263	FLUTE FILTER -	WHA WHA - PERCUSS	ION (18) Fig. 2-4-10	
Q 7	1660 Hz. Flute	Filter	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 8	1660 Hz. Buffe	r	BC 109 B or C blue dot *BC 209 B or C blue dot	W 144- W 146 W 149- W 151
Q 18 Q 19	Wha Wha modula	tor	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 20	Percussion Pul	se detector	BC 108 B or C *BC 208 B or C BC 109 B or C *BC 209 B or C	W 106- W 107 W 116- W 117 W 101- W 98 W 110- W 111
Q 21 Q 22	Percussion Mvb	tr	2N 5172	W 126
Q 23 Q 24	-	eramplifier	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
D 10	Attack Driver.	•••••	OA 70	B 8

Tr	ansicord	deluxe	TRANSISTORS & DIODES LI	ST
Schem.Ref.	Circuit	(No) & Fig.	Туре	Part Code
PA 264	FLUTE FILTER	RS (19) Fig. 2-4-1	<u>.</u>	•
Q 5 Q 9 Q 11	207 Hz Flute	e Filtere Filter	BC 109 B or C red dot #BC 209 B or C red dot	W 143- W 145 W 185- W 150
Q 6 Q 10 Q 12	207 Hz Buffe	er er	BC 109 B or C blue dot *BC 209 B or C blue dot	W 144- W 146 W 149- W 151
PA 265	TREBLE PREAM	MPLIFIER & OUTPUT AMPI	LIFIER (32) Fig. 6	
Q 35 Q 36 Q 37 Q 51	Bass & Chord Chord Filter	ds Preamplifier mplifier (1° stage)	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 52	Treble Pream	mplifier (2° stage)	SGS IW 9640	w 89
Q 53 Q 54		ifier (1° stage) ifier (2° stage)	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 55	Output ampli	ifier (3° stage)	SGS BC 116	w 80
PA 268	VIBRATO-DRUM	A & BRUSH SECTION - BA	SS CHORDS & RHYTHMS PREAM	MPL.(33) Fig.6
Q 25 Q 26		se splitter	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 27	Vibrato phas	se Keyer	SGS IW 11706	W 71
Q 28	Vibrato osci	illator	2N 5172	W 126
Q 40 Q 41	_	Detector	BC 109 B or C #BC 209 B or C	W 98- W 101 W 110-W 111
Q 42 Q 43		brator	2N 5172	W 126
Q 44 Q 45		brator	SGS IW 11711	W 112 W 89
Q 46	Noise Genera	itor	2N 5172	W 126
Q 47	Drum Oscilla	itor\$	SGS BC 115	W 2 8
Q 48	Brush Keyer.		SGS IW 9640	W 89
Q 49	Bass chords	& Rhythms	BC 109 B or C red dot *BC 209 B or C red dot	W 143- W 145 W 148- W 150
Q 50	Bass chords	& Rhythms preampl	SGS IW 9640	W 89

Circuit

Schem. Ref.

TRANSISTORS & DIODES LIST

Part Code

Type

PA 268	Cont'd	
Z 1	Brush noise Generator SGS IZ 9824 B 27	
D 20 D 21 D 22 D 23	Drum Control Briver Control Driver	
DA 071	CHOMATNI ANDITETED (21) Et a. 2.4.15	
PA 271	SUSTAIN AMPLIFIER (21) Fig. 2-4-15	
Q 15 Q 16 Q 17	Sustain preamplifier BC 109 B or C red dot W 143-W 14 Orchestra preamplifier*BC 209 B or C red dot W 148-W 15 Flutes preamplifier	5
PA 287	TREBLE CONTACT BOARD (46-47) Fig. 17-18 (for BUTTON models only)	
I.C. 1+9	Integrated frequency divider W 127	

(No) & Fig.

Power		Supply Unit-"ATR/3"-		PARTS L	IST
	Part	Description	(No) & Fig.	Schem.Ref.	Part Code
					Amp /a pp/4/7
	POWER SUPPLY	UNIT = ATR/3	Fig. 19-20-21	DWG 1-SE/105	ATR/3=RE01/
	Cord " "	A.C.POWER (USA = UL)	fig.19-20	~	K 191 K 38 K 27
	Fuse	4/10 A Slo-Blo,3 AG (USA, CANADA) 200 mA Slo-Blo,5 x 20 mm (EUROPE)	n 11 11 11 11 11	********	F 61 F 1
	Fuse Holder n	USA - CANADA Type EUROPE Type	H H H	•••••	S 34 S 29A
	Jack	Plug (Audio signal output cable)	11 11 11	•••••	RRSS 25
	Switch	A.C. ON/OFF -slide - lighted (UID) и и й×	•••••	X 82
	Socket	Octal, female, for Power Cable	11 11 11	••••	I 120
	Transformer	Power - T 1067-2	11 11 11	т 1067	T 1067-2
	Resistor	82 ohm, 10 W, 10 %, Wirewound	n n	R 3	R 4070
	Resistor	15 ohm, 10 W (5W), 10 %, WireWound	11 11 11	R 4	R 4052
	Resistor	1,8 ohm, 10 W(5W), 10 %, WireWound	11 11 11	R 11	R 4030
	Handl	complete	n n n .	******	MC 25
	PRINTED CIRCUI	T BOARDS		•	÷
	Board	PA 237-2 Rectifier, complete	fig.20-21	PA 237	*63 53/617
	Board	PA 238 Regulator, complete	и и и ,	PA 238	*63 54/617
=	Capacitor	200 uF - 25 V , Electrolytic	11 11	C 4	C 1054
	Capacitor	1000 uF- 25 V , "	. 11	c 3 - c 6	C 1O41
	Capacitor	1000 uF- 40 V ,	. m . m .	C1-C5	C 1066
	Capacitor	1000 uF- 50 V , "	11 11	C 2	C 94
	Fuse	1 A Slo-Blo,5 x 20(only Europe)	n n	F 2	F 6
	Fuse	50mA Slo-Blo, 5x20 (only Europe)	11 11	F 3	F 13
٠.,	Resistor	560 ohm, 5 W, 10 %, WireWound	11 11	R 7	R 6 12
	Trimmer	Pot. 1 Kohm, WireWound, +19V Adj.	11 11	VR 1	P 1.47

Power Supply Unit "ATR/3"- TRANSISTORS & DIODES LIST

Type

Part Code

(No) & Fig.

Schem.Ref. Circuit

			•				
	CHASSIS	POWER SUPPLY Fig. 20-21 = DWG 1	SE/105				
	Q 1	Series Regulator	SGS BD 117	W	84		
	PA 237	POWER SUPPLY= RECTIFIER BOARD = Fi	g. 20-21				
	D 5	Rectifier (4 Diodes)	SGS IX 9809	В	34		
·	D 6	Rectifier Bridge	GIE B35-C800	Ý	22		
	z 3	Voltage Regulator, 15V, Zener Diode	ITT STANDARD ZF 15	В	85		
	PA 238-1	POWER SUPPLY= RECULATOR BOARD = Fig	g. 20-21				
	Q 2	Driver Transistor	SGS BC 143	W	63		
	Q 3	Feedback Amplifier			103-		-
			MISTRAL BC 207 A or B	W	108-	W	109
	D 1 D 2 V	Current limiter (first serial only)	SGS IX 9809	В	34		
	D 3 D 4	Temperature Compensator	SGS IX 9809	В	34		
			MULLARD BZY 88-65V6	В	38		
	Z 1	Voltage reference, Zener Diode	IRCI 1N 708	В	68		
			ITT STANDARD ZF 5,6	В	69		
			IRCI 1Z 6,2	B	87		
	Z 2	+12 V drop - Zener Diode	IRCI 1ZC 6,2		88		
	-	and brown sees	ITT STANDARD ZD 6,2	В	89		
			MULLARD BZY 96 C6V2	B	90		
				7			